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THE AGRICULTURAL OUTLOOK FOR 1960

by

Frederick V. Waugh, Agricultural Marketing Service,

Assisted by

Bushrod W. Allin, Agricultural Marketing Service

Faith Clark and Carl P. Heisig, Agricultural Research Service,

and Gustave Burmeister, Foreign Agricultural Service,

at the 37th Annual Agricultural Outlook Conference

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Last fall, we foresaw a slight drop in agricultural prices in 1959. We expected a small increase in prices paid by farmers, and a drop of from 5 to 10 percent in net realized farm income. But we forecast further increases in land values and in farm assets. And we said that consumers would benefit from ample food supplies and from somewhat lower retail food prices.

These forecasts were substantially correct. But in the first 9 months of 1959, realized net farm income has averaged 15 percent below a year earlier.

Looking ahead to 1960, we now expect a further slight drop in average prices received by farmers, a further slight rise in costs of farm production and marketing, and a further drop in realized net farm income--not so big a drop as occurred this year--perhaps about half as big. Again, we expect ample food supplies and a slight further drop in retail food prices.

Supply the Dominant Factor in the Farm Outlook

Demand and supply are always both important. But much of the time since World War II supplies have been so burdensome that prices have not responded to very favorable developments in demand. Thus, the general trend of agricultural prices has been downward, while there have been upward trends in non-agricultural prices, in consumer incomes, in business investments, and in other factors that reflect a healthy, growing demand. But farm output has risen faster than the market for farm products. The results have been lower prices to the farmer, larger Government stocks of farm products, and greater cost to the taxpayer--but lower retail food prices to consumers than otherwise would have occurred.

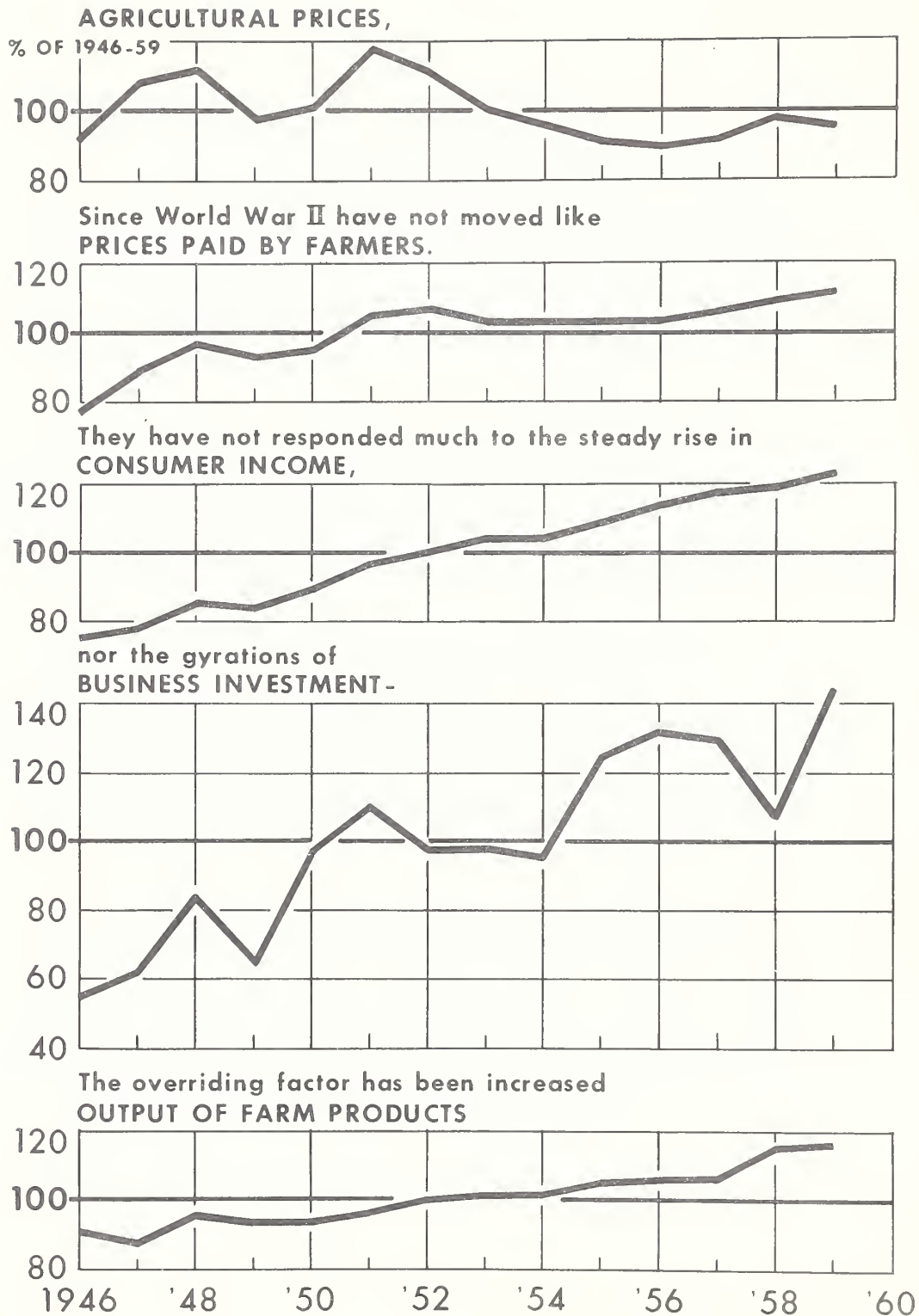


Figure 1

The total output of farm products--crops and livestock products together--in 1959, is now expected to set still another record, slightly above the enormous output of 1958, and 25 percent above the 1947-49 average. Crop production apparently about equals that of last year. Somewhat reduced yields are offset by the use of some land that had been idle under the 1958 acreage-reserve program. Wheat production this year is far below that of 1958, but cotton and corn production are much larger. The output of livestock products is running ahead of last year. The main increases are in hogs, broilers, and eggs. Cattle inventories increased, but slaughter went down slightly.

Expansion of both domestic and foreign outlets for cotton may absorb this year's increased output of 3 million bales, with the carryover stocks on July 1, 1960 about the same as on July 1, 1959. But some further increase in the wheat carryover now seems likely, in spite of a 350-million bushel reduction in output. And a substantial further increase in the carryover of feed grains is practically certain. Most of these carryovers are held by the Commodity Credit Corporation. As of August 31, CCC had \$8.8 billion invested in price-supported commodities, including commodities owned and under loan.

Agricultural output might have been still greater except for the Conservation Reserve, which retired 22.4 million acres from production. The trend in crop yields has been sharply upward in recent years. Increases in the yields of leading farm crops in the past decade have ranged from 20 percent to 75 percent. The feeding efficiency of most farm animals has increased much less than the yield of crops. But the 40 percent gain in broiler production per unit of feed, and, even more, the large supplies of feed grains, suggest the possibility of further large increases in output of livestock products.

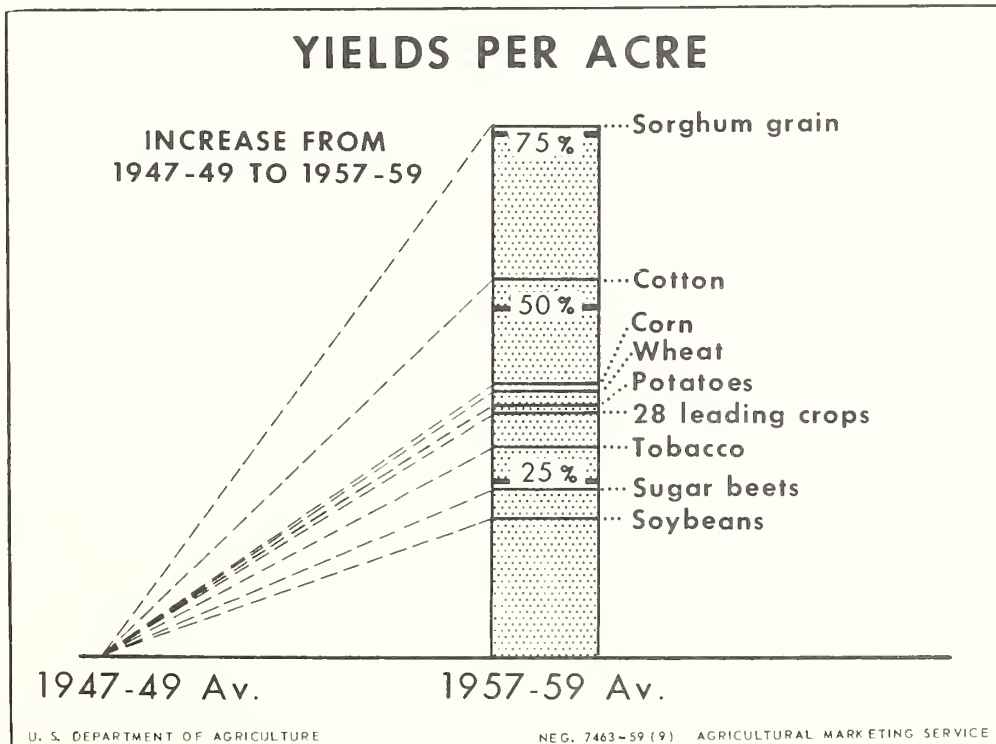


Figure 2

Our main problem is to keep supply and demand in balance in a way that will provide an adequate income to efficient, commercial farmers. For the next few years, at least, supplies of most farm products are likely to be ample.

We are now accumulating surplus inventories of feed grains. At the beginning of the 1958-59 feed grain marketing year, our total carryover of the four feed grains (corn, oats, barley, and sorghum grain) was 59 million tons. By the beginning of the 1959-60 year, it had increased to 67 million tons. All but about 10 million tons of this carryover is under price support. By the beginning of the 1960-61 marketing year, we estimate that it will increase further to about 80 million tons, the equivalent of a half year's crop.

This pileup of feed grains is occurring despite substantial increases both in the number of animals fed and in the quantity fed per animal. Corn is by far the most important of the feed grains, especially since it is the main kind of feed grain carried over from year to year. In the past year alone the corn crop increased 17 percent. On October 1, we had a carryover of 1.5 billion bushels. A year from now we expect the carryover to be about 2 billion bushels.

This steady increase in Government-held inventories should not obscure the fact that about 60 percent of the corn is fed on the farms where grown, and that most of this is fed to hogs. In view of the current depressed level of hog prices, we have been advising farmers not to overdo hog production. We believe this advice is sound so far as the whole livestock industry is concerned.

But this confronts the individual farmer with the choice among many alternatives, each of which has its own problems. For example, if the individual farmer decides that he should produce less hogs next year, what is he going to do with his increased feed supply? If he decides to turn it over to the government under the price support program, he aggravates an already difficult problem facing the Government--the problem of what to do with an excessive inventory. If he decides not to put it under price support and merely store it for use later, he still adds to total carryover. If he decides to feed it to cattle, milk cows, or poultry, and if many other farmers do likewise, he may contribute to lower prices of beef, milk, poultry, and eggs.

Of course, population is increasing, the level of consumer income and living is rising, and the demand for livestock products must therefore rise in the long run. But these long-term trends may not prevent periods of surpluses and low prices in some years. There is also always the possibility of drought, against which it is generally agreed we should insure ourselves by carrying reasonable stocks, but current stocks are larger than most people think are needed for this purpose.

The purpose of the Outlook is not to review programs and policies, nor to propose changes in present programs. But the outlook analysis may often call our attention to potential dangers in current developments. The present surplus of feed grains should put us on guard.

Demand to Continue Strong

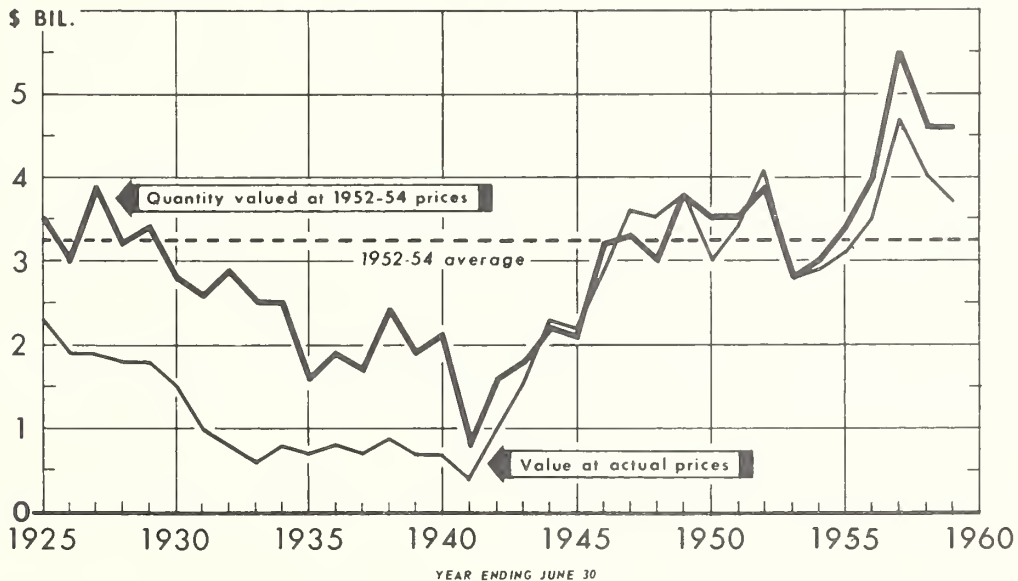
The domestic demand for our farm products has been strong most of the time since World War II. Population has grown more rapidly than expected. Consumer incomes have been at record high--whether measured in current dollars or in deflated to allow for higher price levels. Except for short periods of recession, employment has been high.

Domestic demand was especially good in 1959, as consumer incomes rose to new highs, as employment increased, and as business conditions generally picked up. It should be even stronger in 1960.

In addition to the ordinary market demand, Government programs provide domestic outlets for a considerable amount of foods. Our school lunch programs are now reaching 12 million children. Our school milk programs reach 22 million (including some of the 12 million getting school lunches). Surplus foods in the past year went to almost 7 million needy persons in institutions and families. The main foods distributed through domestic food programs in the past year were milk and other dairy products, corn meal, wheat flour, rice, and dried eggs.

Agricultural exports in the fiscal year 1959-60 are expected to reach \$4 billion. This will be the third highest in history, exceeded only by the exports of \$4.7 in 1956-57 and \$4.1 in 1951-52.

U. S. Farm Export Volume Maintained In 1958-59; Some Decline in Value



USDA

FAS-NEG. 1935

Figure 3

Economic activity continues high in the principal importing areas of the world, especially in Western Europe. The dollar shortage has eased. And trade barriers are being reduced gradually. Exports of our surplus farm products are being bolstered and promoted through Government programs, including those under P. L. 480.

Most of the expected increase of \$300 million of agricultural exports this year is due to anticipated higher exports of cotton. Cotton stocks in importing countries are lower. Cotton consumption is increasing. Production and stocks of cotton are down in most exporting countries. Moreover, the present lower export prices will encourage larger cotton exports from the United States.

Feed grain exports set a record in 1958-59. A severe late summer drought in Europe has reduced forage and feed crops. This, together with the expansion of the livestock industries may make this year's exports of feed grains even larger than the high exports of last year. Foreign demand for soybeans and vegetable oils and fats continues to be strong, and exports may exceed previous records. Rice exports are also expected to increase. Wheat and flour exports may drop somewhat because of favorable crops in several of the major importing countries. But a large volume of wheat will continue to move under Title I of P. L. 480. Exports of dairy products may decline slightly, due to smaller available supplies in the United States. Tobacco exports may be reduced slightly because of increased competition.

Still A Cost-Price Squeeze

While prices of farm products have trended downward in recent years, most other prices have continued to creep upward. This has increased farm production costs. It has also raised the costs of processing, storing, transporting, and selling the farmers' products. This squeeze between lower prices to the farmer and higher costs of production and marketing has been an important factor in the decline of realized net farm income.

Because of the substantial reduction in numbers of farms and farm people, the decrease in per farm income, and in per capita income has been much less than the drop in aggregate farm income. Also, the increased income from nonfarm sources has been an offset to lower income from farming. But during 1959, the per capita and the per farm incomes of farm people from all sources declined from the high levels of 1958, while nonfarm income increased.

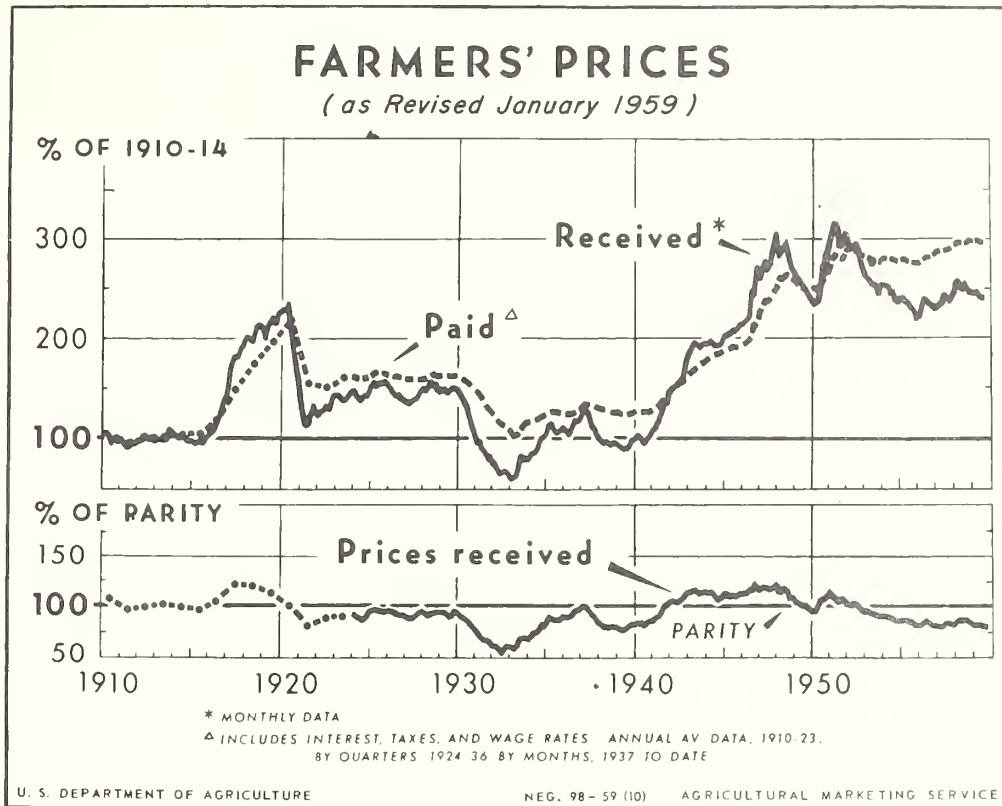


Figure 4

There are some indications that the rise in farm costs may be tapering off. The prices paid index in 1959 will average 2 percent higher than in 1958. But in September 1959, the index was only 1 percent above that of September 1958. Moreover, the September index was very slightly below the level of last spring.

Most of the declines in farm costs in the past year have been due to lower prices for farm-produced items. Thus, in September, farmers paid 2 percent less for feed, and 3 percent less for replacement livestock than they did a year earlier. Prices of feeder cattle were about the same as a year earlier. Prices of feeder pigs and lambs, and of baby chicks were 17 to 30 percent lower.

In contrast to this, prices paid for many industrial items continued to rise--as did wage rates, interest rates, and tax rates. We now expect prices of industrial goods to creep up still further in 1960. Even with further declines in farm-produced items, the prices paid index as a whole may average a little higher in 1960 than in 1959.

Total expenses of farm production (price times quantity bought), however, will probably rise still further in 1960. So far in 1959, production expenses have been at a rate close to \$26 billion--3 percent more than in 1958. This is the third record high in 3 successive years.

Further shifts to production on commercial farms and toward greater specialization will increase both the amounts of production goods bought from industry and the volume of feed and livestock transfers among farms.

Costs of marketing have continued to inch upward, although at a slower rate. The marketing margin for the farm food market basket in the third quarter of 1959 was slightly higher than a year earlier. The farmer's share of the consumer's food dollar in 1959 will average about 38 cents. This is a postwar low. It compares to 40 cents in 1958.

Some further small increases in marketing charges are likely in 1960.

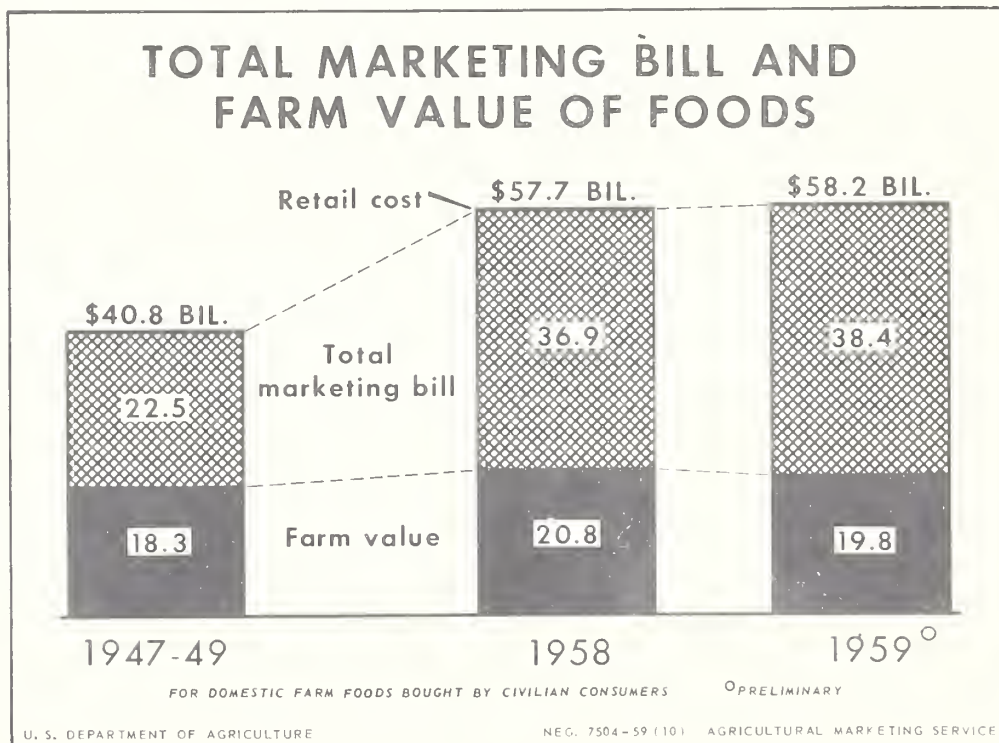


Figure 5

Government Programs About Same

Government programs in 1960 will be about the same as in 1959.

Available funds will permit an expansion of about 5 million acres in the Conservation Reserve next year.

Public Law 480 has been extended for a 2-year period, ending December 31, 1961. This provides about the same level of assistance to farm exports as at present.

No major changes in price-support levels will occur during the coming year.

The minimum support price for wheat in 1960 has already been announced at \$1.77 a bushel, compared to \$1.81 in 1959.

The national average support price for the 1959 crop of corn is \$1.12 per bushel. Under the new program provided by the Agricultural Act of 1958, corn produced anywhere in the United States in 1959 that meets quality and storage requirements will be eligible for support at the same national average level with adjustments for grade, quality, location and other factors. The support price for the 1960 crop of corn will not be much lower than that for the 1959 crop. The 1958 Act also makes price support mandatory for the other feed grains--oats, rye, barley, and grain sorghums--at a level determined to be fair and reasonable in relation to a number of factors, including feed value in relation to corn.

The 1960 cotton program will be similar to that of 1959, except for some differences in support levels. Each producer will have a choice between (a) his regular allotment with support based on the supply percentage (not less than 75 percent of parity, compared to not less than 80 percent of parity in 1959) or (b) planting up to 140 percent of his regular allotment with support at 15 percent of parity less than the support level for Choice A cotton. Supports at these levels are contingent on grower approval of marketing quotas in the referendum of December 15. The national acreage allotment for the 1960 cotton crop is 16.3 million acres.

The incentive price for wool at 62 cents per pound and the support price of 70 cents per pound for mohair announced for the 1960 marketing year are the same as those for the past several years.

Farmer's Prices and Income Probably Lower

So far this year, agricultural prices have averaged about 3 percent below those of a year earlier. The biggest declines have been in prices of hogs, broilers, and eggs. Comparing the first 9 months of 1959 with the same months in 1958, hog prices were down 27 percent, broilers down 16 percent, and eggs

down 19 percent. While hog prices may not drop further, they probably will continue to be low throughout the coming winter and spring, at least. Cattle prices may decline moderately with larger marketings next year. But no sharp drop is in prospect if range conditions are good and if cattlemen continue to be confident that they can sell a steadily increasing volume without seriously disturbing the market. This, together with modest reductions in price supports for a few commodities, indicates the likelihood of a small further decline in the index of prices received.

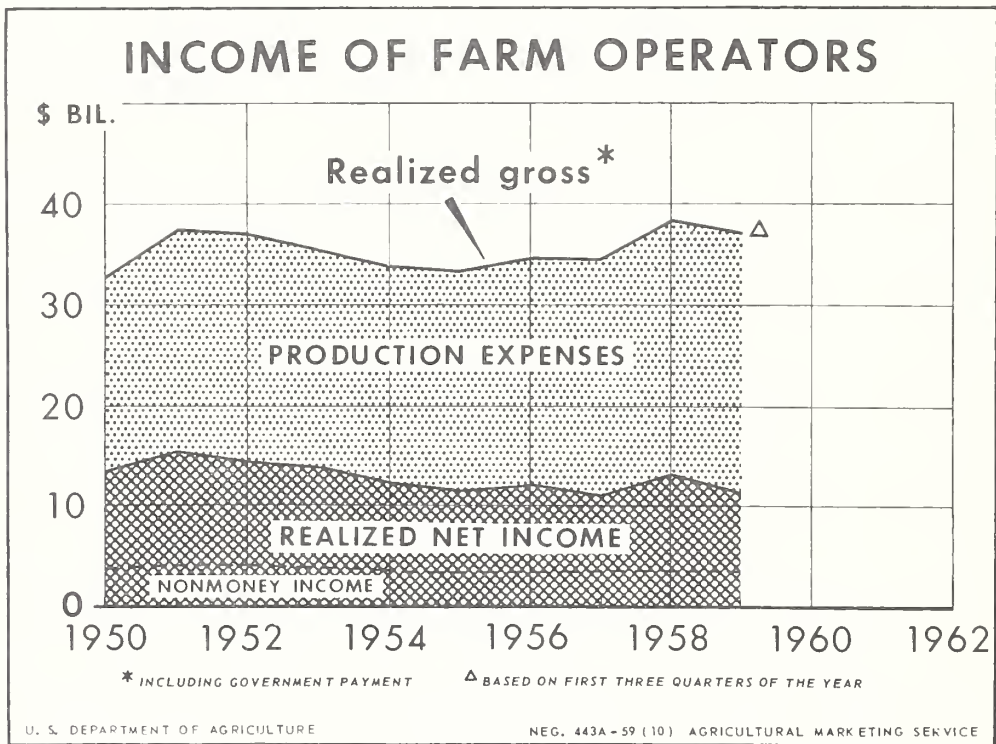


Figure 6

Since we expect a slight further increase in prices paid, the prospect is that the parity ratio will decline a little more. In October it has stood at 79.

In the first 9 months of this year, realized net farm income has averaged 15 percent below a year earlier. This was more of a drop than we foresaw a year ago. The drop was due to three factors: (1) lower receipts from farm marketings, (2) higher production costs, and (3) a substantial drop in Soil Bank payments, resulting from the elimination of the acreage reserve program.

Next year, we expect some drop in cash receipts from cattle and hogs (due to lower average prices), and from wheat (due to this year's smaller crop). Cash receipts from most other crops may be about the same. Those from milk and eggs may well be a little higher than this year. We expect a further small increase in total production expenses.

While the outlook is for some further declines, both in agricultural prices and in farm incomes, present indications are that the drop in average prices of farm products may be about the same as occurred during the past year, and that the reduction in realized net income may be perhaps about half as big as the decline that occurred this year.

Farm Assets Still Rising Slightly

Farmland values, farm assets, and rural levels of living have continued to rise, in spite of declines in agricultural prices and in farm income since 1951. But trends in 1959 suggest that these increases may be tapering off.

The increase in total farm assets this year was the smallest in recent years. On January 1, 1960, farm assets will have a current market value of about \$208 billion. Farm debts will approximate \$24 billion and proprietor's equities, \$184 billion. The assets and equities reflect increases during 1959 of about 2 1/2 percent, less than a third as large as the percentage increases that occurred in 1958.

In 1959, as in other recent years, the rising value of farm real estate accounted for more than half of the total increase in farm asset values. The value of the livestock inventory also has increased again in 1959, despite declining prices of hogs and poultry. Farm purchases of motor vehicles, farm machinery, and household furnishings and equipment have been stepped up. And the financial assets owned by farmers have increased slightly. The increasing numbers, and continued high prices, of cattle are mainly responsible for the increase in value of the livestock inventory. Chiefly because of a smaller wheat crop and a change in the cotton price-support program, farmer-owned crop inventories are expected to be lower on January 1, 1960 than a year earlier. The record corn crop of 1959 will raise the inventory value of this crop above the level of a year earlier.

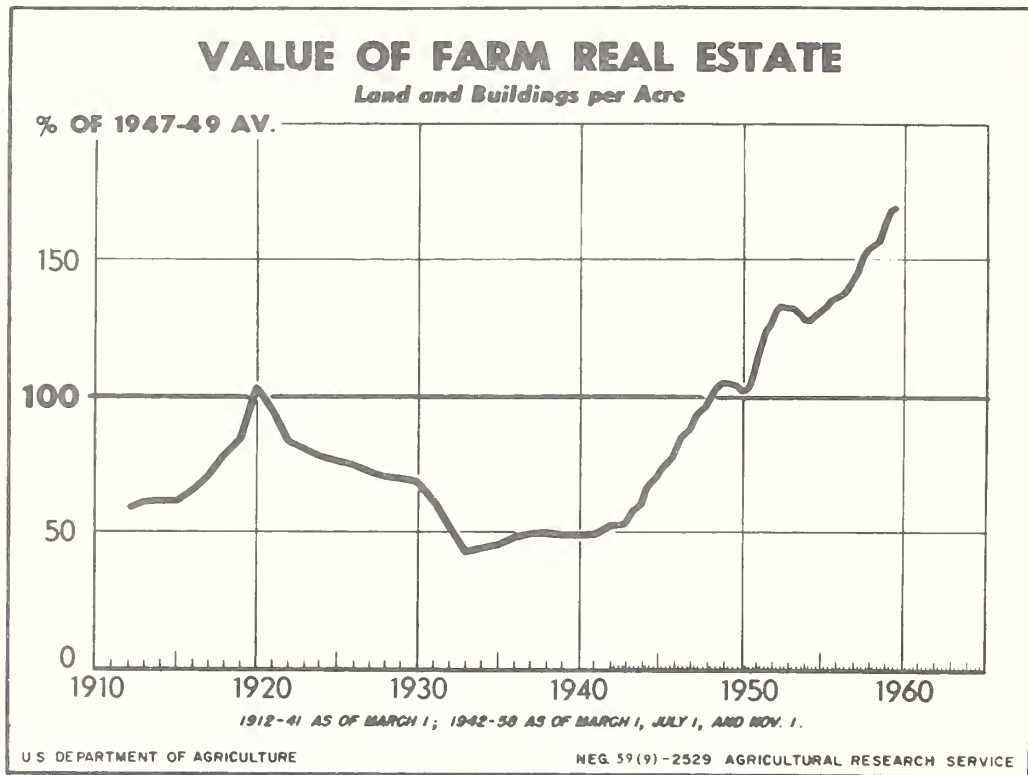


Figure 7

The sharp rise in land prices of the past 5 years, which added nearly a third to market values, may be approaching an end. The drop in farm income in the last half of 1959, and the prospect for some further decline likely in 1960, will remove some of the stimulus to the farmland market. The longer-range outlook is also clouded by further building-up of crop inventories from the 1959 harvest, and by uncertainties as to changes in farm legislation. Current levels of interest rates and stronger competition for the available supply of mortgage credit may also postpone some purchases of land, particularly if these conditions are viewed as temporary.

Partly offsetting these price-depressing factors in the land market are the continuing pressures for enlargement of farms and the latent demand of farm operators for the limited number of tracts of land that come on the market. Even though average farm income is lower, there is likely to be a sufficient number of farmers in most areas with surplus funds, or in a favorable position to borrow, to maintain this type of demand. The prospects of further gains in the general economy, continuing inflationary pressures, and the conversion of farmland for nonfarm uses are likely to continue to support land prices in some areas.

Consumers to Benefit

Abundant food supplies have been a great boon to consumers in recent years. This boon will continue in 1960. Although food prices were record high in 1958 and near record in 1959, expenditures have remained low relative to consumer income.

U. S. civilian per capita consumption of food is a little higher in 1959 than last year. The rates for chicken, turkey, cheese, and margarine will be record or near-record high in 1959 and 1960. But per capita consumption of butter, lard, cornmeal, and wheat flour will be at, or near, new lows. Consumption of pork, lamb and mutton, fresh citrus fruits, and frozen concentrated orange juice recovered noticeably in 1959 from the year-earlier low levels. Consumption of these items is expected to remain at the higher level in 1960.

The nutritional quality of the food supply in 1960 will be about the same as in 1959. During both years levels of two vitamins--B₁ and C--will be slightly higher than in 1958 because of pork and citrus fruit.

The general level of all retail prices advanced only moderately during the past year--about 1 percent from September 1958 to September 1959. The small rise in the total index covers up a drop of over 1 percent in food prices--more than offset by increases in prices of other goods and services.

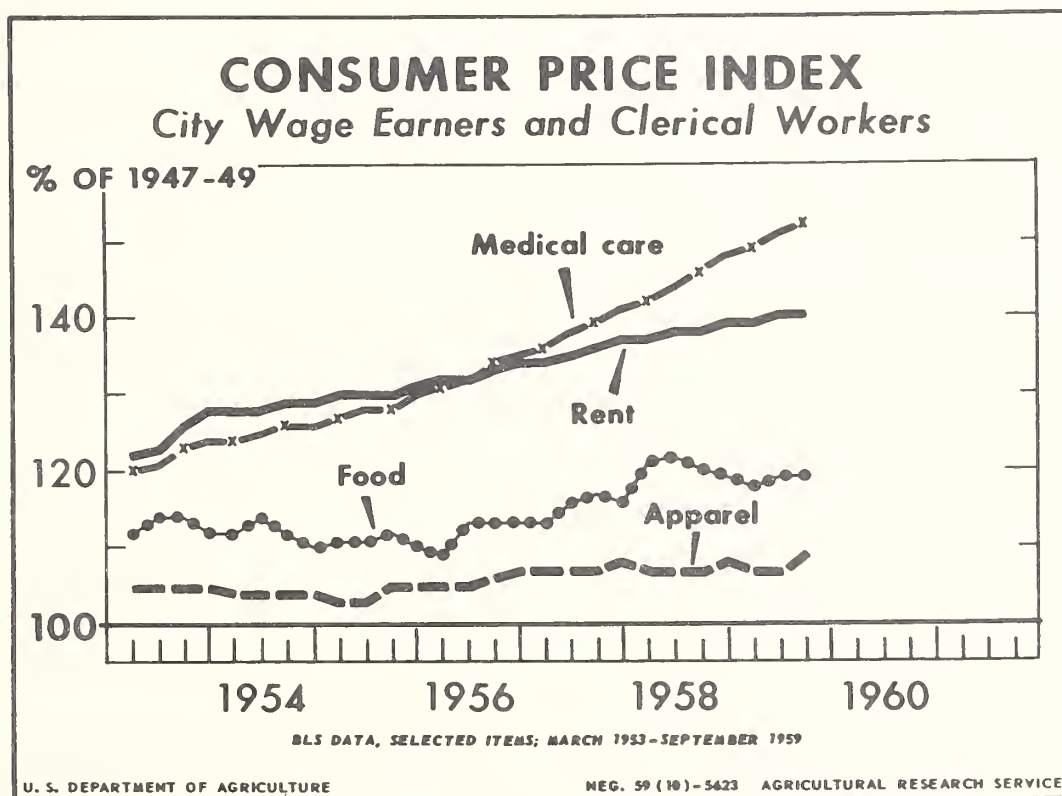


Figure 8

Several recent developments indicate that prices of consumer goods and services, other than food, will continue to advance in the coming months. The increase in the Federal gasoline tax, already effective, will increase transportation costs. If the settlement of the steel strike results in higher prices for steel, prices for household equipment which use steel will also likely increase.

Wholesale prices of most fabrics--cotton, wool, and manmade fibers--used in the production of clothing have advanced since spring. Wholesale prices for textile housefurnishings and wool floor coverings are also increasing. These wholesale price advances have already begun to be reflected at the retail level, and further retail price advances are expected in the coming year. There is nothing to indicate that the long uptrend in charges for rent, medical care, and other consumer services will be halted during the coming year.

Since only a small decline in retail food prices is anticipated during the coming year, and indications are that prices for other important goods and services will increase, it appears that overall family living expenditures will be a little higher next year than this.

Better Farm-Family Living

To this point, we have considered the present situation and the prospects for 1960. We now turn to some of the longer-term trends in the levels of living of farm people. These trends have been definitely upward, although at levels that are lower than those attained by nonfarm people.

Infant mortality, one indicator of family health status, dropped about one-fourth in rural areas from 1948 to 1956. The drop in infant deaths was accompanied by a rise in the proportion of babies born in hospitals. In 1956 almost as large a proportion of babies born to rural mothers as to city mothers arrived in hospitals.

Rural States still lag behind urban States in availability of physicians to care for their people. The physician-population ratio is about half as great in the most-rural as in the most-urban States. But voluntary health plans are growing, and further growth is likely in the next few years.

Important changes are occurring in the education of people living on farms. A larger proportion of high school and college-age boys and girls from farms are in school than ever before. The proportion of farm residents who are high school graduates is increasing rapidly. Farm people haven't caught up with city people in education yet, but they are making good progress in that direction.

Between 1950 and 1956 the most-rural group of States increased their spending for public schools slightly more, proportionately, than the most-urban States. The most-rural group increased the per pupil amount for current expense of primary and secondary schools by about one-fourth; the most-urban States

increased it by one-fifth. In 1956, however, the most-rural group of States was still spending only about half as much per pupil for current expenses of primary and secondary schools as the most-urban group.

Facilities on farms and the types of equipment and furniture in farm homes also are indicators of family living. The estimated value of home furnishings per farm household in 1959 is expected to be about 60 percent greater than in 1950 in dollars of constant purchasing power. The increase in the value of farm home furnishings reflects, in part, the larger number of electrical appliances farm families have. Practically all farmers can use such appliances now, because most farms are supplied with central station electricity. One interesting statistic is the tremendous increase in television sets in farm homes. According to the Bureau of the Census, 73 percent of all farm homes now have one or more television sets compared with 3 percent in 1950.

Because nearly all farms now have electricity, there is only a small margin for further growth here. Few homes that are electrified do not have the major electrical appliances commonly associated with our American standard of living. There is reason to believe, however, that acquisitions of TV's, freezers, and the smaller items will continue. With lower family incomes, however, the rate of acquisition may be expected to slow down.

The last decade has seen a very large increase in the number of telephones on farms. In 1958, 60 percent of all farm homes had telephones compared with 38 percent in 1950, the year the REA telephone program was started. In 1960 and years immediately following, there will be a further increase in the number of farm homes and rural businesses with telephones. More important still will be the improvement in service--such as modern dial service around the clock, fewer homes on a party line, and single rings for each home; in fact, all of the characteristics of urban telephone systems.

So much for measures of the rising levels of living of farm people. We now look again at the immediate outlook for producers of the principal farm commodities.

Commodity Highlights

Some improvements are likely in markets for dairy, poultry, eggs, and rice. Prices to farmers for milk and butterfat will probably average higher than this year, while volume of dairy products and cash receipts from their sale may reach a new record. With higher costs, however, net income will probably not change very much from this year. Reduced production of eggs and broilers in the first half of 1960, seems likely, which will tend to strengthen prices for both of these commodities. With further improvement in the export market for rice, carryover on August 1, 1960 is expected to be appreciably lower than in 1959. Prices received by farmers this year averaged 33 cents above supports, and in 1959-60 they are again expected to be above the announced support rate of \$4.38 per hundredweight.

In meat animals, 1960 production is expected to be somewhat larger than this year, but a very high level of demand should continue. Hog prices are likely to continue near present levels during the winter and spring. The total 1960 spring crop may be down slightly from this year, with hog prices in the fall and winter of 1960-61 as high or perhaps somewhat higher than in the same period of 1959-60. Total slaughter of cattle and calves will be larger than this year. Any rise in cattle prices during the spring is unlikely to be as marked as in the spring of 1959, while somewhat lower prices are expected in the last half of that year, compared with the last half of 1959.

Supplies of edible fats, oils, and oilseeds in 1959-60 may be around 8 percent above the 1959 record. This increased supply, together with lower support prices for oilseeds, will mean somewhat lower prices for these food fats. However, increases in exports may prevent further rise in the total carryover of food fats.

Supplies of cotton for 1959-60 total about 23.7 million bales, up 3.4 million from last year. But with anticipated increases in exports and domestic mill consumption, the carryover at the beginning of the 1960-61 marketing year may be about the same as the 8.9 million bales on hand August 1 of this year.

Although the 1959 wheat crop is nearly one-fourth less than in 1958, it is still somewhat higher than anticipated domestic disappearance and exports for 1959-60. Accordingly, total carryover on July 1, 1960 is expected to be larger than the record quantities on hand July 1 of this year.

Total supplies of feed grains and other concentrates, have been trending upward over the past 7 years, reaching a new high of 265 million tons for the 1959-60 feeding year. With a record feed grain crop this year, total supplies are at an all-time high, and the carryover of feed grain stocks at the beginning of the 1960-61 marketing year is expected to increase somewhat further. Feed grain prices are expected to average a little lower in 1959-60 than in 1958-59.

CHANGING AMERICAN LIVING PATTERNS AND VALUES

Margaret G. Reid
Department of Economics
University of Chicago

Change and progress are main themes in our society. Probably never before has there been so much stock-taking, so much looking back over the years to see how far we have come and so much comparing of groups within our present society to see where progress has been made and where lags have occurred. This scrutiny has been accompanied by attempts to isolate conditions causing change, to test notions as to what brings progress for some and not to others. We want to know what lies ahead and how to shape the future in order to maximize the good things of life, to minimize the bad and to avoid accidental disaster. We have long been conscious of our greatly increased productivity and are now debating the impact of the vast potential productive power that looms just ahead with the development of nuclear power and other technological changes that seem certain to occur. With this growth of productive power there has come an increased recognition in groups like this that such power is no more than a means to an end, that it is a valuable but not a sufficient condition for a good society. To an increasing extent the basic issues of society are being reviewed. These relate to people, how they live and how their living can be improved.

Questions that arise in such a review make us painfully aware of the limitations of science. What makes for high quality living is a question unanswered in its entirety by scientists. Nevertheless knowledge of life situations is invaluable evidence for those guiding decisions, and my paper attempts to present a few highlights of the change of the past half century with special attention to farm families. In attempting this I am reminded of Stephen Leacock's hero who got on his horse and rode off rapidly in all directions. Family living has changed in many ways, each of which if fully dealt with would occupy the entire time at my disposal. My dilemma is heightened by my uncertainty as to how the picture of change should be painted. What change is central? what is secondary? what should be accented? What gradations of color, of light and shade should be used? There is now a vast literature on changing family living, and many people have tried to summarize the evidence available and to appraise conditions giving rise to change and their effect. With this literature I have some acquaintance, enough to know that in spite of certain pervasive types of change, what is true for some families is not true for all. In addition

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interpretators of the changing world are far from being in agreement. I shall concentrate largely on general tendencies, touch on some exceptions and comment briefly on significance of change.

Increased production is meaningful only as it enlarges the stock of goods that families have and improves their quality. On one thing there is no doubt. The stock of consumer goods consumed has greatly increased. Families are more abundantly fed, clothed and housed than they have ever been before. Health services are of better quality and more generally available, the average number of years in school for children has increased greatly and means of communication such as the automobile, the telephone and more recently TV have widened the horizon of the world in which families live. These changes have occurred in the North, the South, the East and the West, and for farm as well as nonfarm families. In some ways, however, the transformation of the past fifty years has been greater and some of it has been more recent for farm than for nonfarm families.

The coming of electric power lines to the farm communities has been an important force transforming living conditions. This became general in farm communities only during the past decade. Anyone comparing a farm before and after electrification is certain to be impressed with what it has done to reduce the hard labor of many tasks, both in the home and on the farm, and to make for pleasanter living in general.

We have come a long way from the picture of farm family life presented in the 1909 Yearbook of Agriculture. There W. R. Beattie describes the situation as follows:

"The days of the home spinning wheel and loom are past, but in many farm homes little has yet been done to lessen the burden of women's work, although labor-saving devices are both numerous and easily installed. Public opinion seems to be divided upon the question of conditions existing in the homes of farmers, but to one familiar with facts the need of improvement is apparent. It is true that farmers and their families are, as a rule, quite comfortable and happy, but with the present labor requirements of the home too little opportunity is afforded for mental improvement or social life.

"The first and most important consideration in home improvement is a wholesome and plentiful supply of water. Until recently it was necessary to locate the dwelling near the water supply, but with the great advance in the manufacture of pumps and piping it is now feasible to transport the water any reasonable distance...

"The advent of the gasoline engine into common use on the farm has made possible the combination of a number of labor-saving facilities, including the pumping of water. It is now practicable to provide the most isolated country home with electric or acetylene light, modern sanitary fixtures, hot and cold water, dairy and laundry machinery operated by power and even ceiling fans and motor-driven sewing machines. Some of these may be classed as luxuries, but others are conveniences that will greatly relieve the burden of work in the farm home.

"A well equipped laundry room should have stationary tubs, hot and cold water, a washing machine, a clothes' wringer, a stove and an ironing table. As an adjunct to the laundry there should be provided in the yard a permanent wire clothes line...

"In certain thickly populated country districts the cooperative laundry scheme is giving good results..."

Among the minor conveniences described are an open-air cupboard and a screen-porch cupboard. Nothing is said about the possibility of modern refrigeration, and air-conditioning was probably not yet thought of even for the Utopia of the farm family.

Some of the possibilities seen by Beattie were fulfilled. It was, however, the coming of the electric power line that initiated the great change, with electric lights coming first. In many homes these were quickly followed by the provision of a bathroom with hot and cold running water, a power vacuum cleaner, electric stove, refrigerator, a frozen food-locker, a walk-in refrigerator and more recently air-conditioning. Many a farm housewife viewing her new possessions felt a thrill of pride at having achieved all and more than her urban friends. The electrification of farm homes is by no means complete. For some time past progress of both urban and rural families has been measured in terms of the availability of electric power and possession of things related to it. Among nonfarm people, except in villages, this yardstick has lost its usefulness because the electric power and things closely associated with it are now so universal, and for farm families this limit is being approached. The rapid introduction of TV, in its early stages in large cities in 1950, provides an interesting example of the speed with which new products reach families. In May 1959, 73 percent of the rural farm households had a TV-set, 86 percent of the rural nonfarm and 89 percent of the urban.

The increase in real income and easier access to retail markets have had an important effect on farm family living because they have reduced the effort going to production of food for family consumption. The spring butchering and the curing of pork for summer use is now largely a thing of the past. So also is the home-butchering of beef, since beef coming from the home-farm herd is likely to be processed by a butcher and held at the freezer locker. The churning of butter for family use has almost disappeared. The farm garden continues, but the effort going to canning of fruits and vegetables for out-of-season use has been greatly reduced, and the buying of canned products is no longer considered the mark of the spendthrift farm housewife. The home baking in the farm household has also declined although the decline is much less for farm than nonfarm families. It seems important to note, however, that the home garden and milk from the family farm still seems important to high level nutrition of families. For many families if these things are not available from their own farm, their diets tend to lack needed nutrients. Until money income of farm families is at a higher level or they are handier to retail markets the need for a garden and a cow continues to be important. This is an essential difference between farm and nonfarm families.

The two most commonly used yardsticks of progress are increase in real income and decrease in death rate. Over the past fifty years real income has increased greatly and at the same time the death rate has fallen. Its fall has been most spectacular for children. The trend has tended to narrow the difference between the farm and urban people. In general farm communities have always been considered to be healthier than urban. This difference continues. "For white males, the expectations of life at birth in rural areas were 10.0 years above those of the urban areas in 1900, 7.6 years in 1910 and 5.4 years in 1930. In 1939, when deaths were classified by place of residence of the deceased rather than place of occurrence of death, rural death rates remained lower than those in urban areas but the gaps had been reduced substantially. For white males the expectation of life at birth was 61.6 years in cities of 100,000 and more, 61.4, in other urban areas and 64.1 years in rural areas." ^{1/} In terms of life expectancy the farm population is still ahead.

In spite of the lesser mortality of the rural population there is much concern among rural people about an inadequate supply of health facilities in rural areas. Studies have shown that medical, dental and hospital facilities per 1,000 of the population is less in rural counties than urban counties. Such measures may be somewhat deceptive because of a tendency for such facilities to concentrate in the large cities and for families to go to them. However, various studies show that farm families tend to use health services less than nonfarm people even where there is little evidence of lesser need. For example, the proportion of persons who had lost all permanent teeth is greater at all ages for rural than urban population. There is also evidence that farm people get less dental care than urban. In addition the recent survey indicates that the farm population to a lesser extent than the nonfarm population has been availing itself of health insurance protection. Some of these differences may be related to the relative level of money income of farm and nonfarm people and some to the supply of services available, and some to a lag of customary ways of meeting life situations. With the continued blending of the urban and rural communities, difference between urban and rural counties seems likely to narrow.

A third measure of progress is the number of years in school. In this respect the farm population has lagged far behind the nonfarm population, and the difference among states for the farm population is very great. Even a cursory review of the factors that may have contributed to difference in school attainment is not feasible here. It is, however, one that is receiving a good deal of comment at the present time, because of the increased awareness in the country in general of various shortcomings of our educational system in meeting the demand of the dawning nuclear era, and increased awareness that economic opportunity for farm as well as the nonfarm children lies in high school and college education.

^{1/} Conrad Taeuber and Irene B. Taeuber, The Changing Population of the United States, New York: John Wiley & Sons, 1959, pp. 274-5.

The attainment of high-level education poses problems unique to rural communities, and especially to farm areas where children now attend so-called country schools with one or two teachers. The decline in the farm population has reduced the number of children in such schools and the ability to attract highly qualified teachers. In addition ideas about high-quality education has changed. There seems little doubt that the reorganization of rural schools is likely to receive a great deal of attention in the years just ahead.

The consumption of farm families has changed, and their dependence on market goods increased. But even more important has been the change in their general orientation, in how they see the future for themselves and their children. Improved means of communications have been a great transformer of living in the country in general. Its impact on the farm family has been especially great because of the greater isolation that preceded the coming of hard-surfaced roads, the automobile, the telephone, the radio and TV. Horizons have been extended and life has taken new forms. With greater ease of travel has come the possibility of earning income in town and village for those wishing to remain on the farm. At the same time migration from farm to city has been occurring--for a time at least it was akin to a flood tide. Thus farm families more and more see the continuity of life for themselves and their children, not in the farm community where they or their grandfather settled, but in an area encompassing the economy in general. To some people this change has entailed a loss, for example, a loss of membership in a close knit group centered in their children and grandchildren and in the school, and church they first attended, and the country store frequented where there are no strangers, at least not for long.

While farm people sought economic opportunity for themselves and for their children in nonfarm occupations, the proportion of the population in farms shrank and that of cities, large and small, expanded. A two-way flow thus occurred, hard-surfaced roads, automobiles and buses brought to rural areas urban people whose main focus of life lay in a city. Among these are the so-called urban farmers, those who operate a farm in considerable measure as a recreational sideline or as a security against inflation. Thus farm and urban living in a real sense has been merging not only in terms of kind of goods purchased but also in face-to-face contacts. The diversity of interests, attitudes and views represented in many rural areas is now much greater than two decades ago. In many areas the unification of this diversity into a rural community is still in a very preliminary stage. With good leadership a richer fuller rural community should emerge. It will be a blending more than ever before of farm and nonfarm people. These rural communities will, however, probably be more amorphous than those of 50 years ago. This seems assured by the wider range of contacts of the members and by the relatively high mobility of the future population of rural communities, even among those for whom agriculture is the main source of income.

In spite of the rise in real income poverty still continues. It continues in both farm and in nonfarm population. Many inquiries have been undertaken to try to bring to light its causes and conditions that would lead to its elimination, but problems related to it are not easily solved. They do however appear to be more important for the farm than for

the nonfarm population. This is indicated by the fact that among states average income of 1949 was much more unequal for the farm than for the nonfarm families, and it seems highly probable that this was accompanied by greater inequality of consumption among farm than among nonfarm families. There seems little doubt that some inequality will disappear with reduction in the isolation that long bottled up some farm communities, with increased mobility as families seek out better opportunities, with increased education, and with reduction in artificial barriers to opportunities, such as those affecting the Negro population and some recent in-migrants to the United States. The flow of the in-migrants from Puerto Rico and Mexico has contributed much to the low-income groups of both the farm and the nonfarm population. America has, however, had long experience with helping the new immigrants to find a place. The presence of such low-income groups, low in our terms but not in terms of the economy from which they have come, should not be viewed in any way as a failure of our society to promote economic opportunity. Failure will occur if the income of these recent in-migrants does not improve. In fact the rate of such improvement should probably be greater than that of the population in general.

The security of income as well as its adequacy has been a matter of much concern, especially since the Great Depression. That experience brought home to farm people, as never before, the extent to which they were a part of the far reaching economy, that they can no longer provide for themselves the things they want, that their possessions and way of life are very dependent on the market price of their products and that state of the economy in general. How to minimize the sharp drops in income continues to be a matter of debate, and one of vital concern to farm families. I do not believe that a longrun decline is likely so long as real income in the economy in general tends to rise and so long as off-farm economic opportunity continues.

Various programs designed to increase and to stabilize farm income have been tried and their suitability is still a matter of keen debate. At the same time there has developed an extensive social security system. At first it was applied solely to wage and salary workers. The trend has been to its greater and greater coverage of the population. In recent years Old Age and Survivors Insurance and disability provisions have been extended to the farm population, to farm operators as well as laborers. This extension is still much too recent to gauge how well this program initially conceived for the nonfarm wage earner is adapted to farm families in general. The economic security of farm operator families has long been and continues in large measure to be sought in the ownership of a farm and its operating capital. For this reason then the economic security is closely related to the financial institutions that make agricultural credit available. This link seems likely to continue.

Increase in real income makes available additional purchasing power. In some quarters there has been concern about over-production, that people would not know what to do with additional income. Some potential production will be sacrificed for increased leisure. Such a tendency has been apparent among both farm and nonfarm people. Even so there seems little shortage of ideas as to what and how consumption might be expanded.

Expansion continues. Hagood, for example, reports that "Farm-operator families in the United States...improved their levels of living significantly between 1950 and 1954." ^{2/} The 1954 farm-operator level of living index was 15 percent over that of 1950. This rise from 1950 to 1954 was a continuation of the general improvement that had been underway since 1940.

As I see family behavior, goals tend to be set a little beyond what currently seems feasible. When income rises and this higher level is expected to be maintained, there tends to be a corresponding increase in goals. In fact some urban men claim that their wives have next year's income spent before it becomes a reality. Perhaps farm wives feel that their husbands have the increase spent before it becomes a reality, so that no matter how high is this year's income the extra inflow of funds must go to liquidate a farm debt, a mortgage on the farm or a loan for the purchase of farm equipment. With increase in the price of land and the greater importance of farm operating capital this seems not unlikely. Many examples of this kind are likely to be provided when a group of farm women meet to discuss family finance.

I find some writers on family finance using the phrase "discretionary" spending, seeming to imply that families now feel that they have more income than they really need, something to play around with, to experiment with and not feel too badly if the experiment does not pan out. I doubt very much that the sense of having a surplus for experimentation is much greater now than 50 years ago--that too was a period of rising income. In the experience of families variation does of course occur in the feeling of current surplus and stringency, the ability at one time to splurge and the need at another to watch every penny. These feelings are likely to be related to the ups and downs of income, from year to year, a condition common for farm families, to change in number of dependents with whom income is shared, and the stage in paying off the mortgage. These conditions bring no change on longrun family goals, such as tends to occur with above-average attainment, or a rising national income representing generally increased economic opportunity. Thus it seems best for educators to assume that wise choice in the use of income is a matter of continuing concern to families, that they still do not want to pay any more than they have to for the household equipment, the clothes, or the food they buy. This feeling of the need for economy continues even though most families are able and willing to spend more for their food, clothing and other types of consumer products. They want a higher quality, but do not want to pay more than is necessary for that quality.

As consumer-buyers the world of the farm and the nonfarm families is very similar. In one respect at least problems have greatly increased. Choice is much more difficult than formerly. Families are surfeited with alternatives. New materials have replaced old, such as in clothing and house furnishing. A great increase has occurred in the degree of processing, whereby household tasks have, as it were, left the home and entered

^{2/} Farm-operator Family Level of Living Indexes, 1945, 1950 and 1954, U. S. Department of Agriculture, Stat. Bul. No. 204, March 1957, p. 1.

the factory, e.g., in food and clothing. And wholly new products have appeared such as many types of household equipment. Established customs and traditions help little in the evaluation of these. Information as to their merit, how to recognize quality and how to use or care for the new products in the home creates need for a continuing program of consumer education and for the development of grades and standards, to increase information available to consumers at time of purchase and to evaluate performance of products available. In this field the consumer testing agencies, initiated in the twenties, have made a very important contribution, so also have various agencies specializing in the development of standards for consumer products. The contribution of these agencies seems likely to increase. In the education for consumer buymanship the rural families have the great advantage of the programs sponsored by the agricultural extension service. In few states do urban families have the advantage of such a reliable impartial source of information to which to turn.

The evolution of legislation to protect consumers from deception and misrepresentation has come a long way, even though still imperfect. There is need for continued scrutiny with respect to enforcement, the possibility of loopholes, the need for adaptation to technological change and possible feasibility of additional information on labels that would be useful to consumers. In this the combined efforts of commodity specialists and family economists are needed.

Misrepresentation of terms of credit sales and of consumer credit in general is still a serious problem, even though some progress has been made through legislation on conditional sales agreements and small loan acts. Nevertheless financial tangles related to instalment purchases are very common. Consumer education is without doubt an important means of dealing with this. It is very difficult through legislation to protect consumers who sign unread contracts, and who contract future payments without a careful review of their future income and other commitments.

Protection of consumers from sales pressure has made little or no advance. In fact some people feel that the defenses of consumers have tended to weaken. They point, for example, to mass communication through radios and TV that reaches into every home and influences even pre-school children, and to hidden persuaders by which people are presumably influenced through their subconscious. I find the claims and counter-claims on these issues very difficult to evaluate. Protection of consumers seems likely still to come from the boastings of many advertisers neutralizing each other. However, more support to the Federal Trade Commission from consumers in general should help to reduce the frequency of half-truths, or what might better be described as marginal lies.

The sense of change and of uncertainty as to what lies ahead, the need for scrutiny of the economy and for search of more effective rules to guide the vast network of interrelations that make up the nation are felt by farm and nonfarm people alike. You as leaders in rural communities have a continuing need for information and revision of perspective to see the best means of achieving goals that have remarkable continuity. These are the goals of personal liberty and growth of individual persons combined with a recognition of the rights of others. I see little

likelihood of the impetus to change being modified appreciably in the near future. To achieve our goals traditional programs are often insufficient. The current program of the Department of Agriculture relating to poverty among farm families gives full recognition of this. Here imagination as to the development of persons seems of the utmost importance. In many other areas a new look with insight and imagination is needed. In this period of change you can take comfort in the fact that great achievement as seen by later generations has often been accompanied by instability and much perplexity and debate.

UNITED STATES DEPARTMENT OF AGRICULTURE
Agricultural Research Service
Institute of Home Economics

FINISHING MATERIALS FOR FLOORS AND COUNTERS

Mildred S. Howard, Housing Specialist

FLOOR MATERIALS

The ideal material for a kitchen floor is one not damaged by moisture, acids, alkalies or grease; resistant to soil and stains; resilient enough to recover from indentation and to be comfortable underfoot. It should retain its color and gloss regardless of the number of times it is cleaned and wear as long as the family wishes it to wear. There is no one material on the market that satisfies all of these criteria. There has, however, been a greater choice in floor finishes since World War II than before due to the development and increased production of synthetic resins (artificial materials that have the properties of natural resins produced by plants). Today the homemaker can choose one of five resilient floor coverings, in addition to wood, ceramic tile, brick, or concrete. Our discussion today will be limited to the resilient floor finishes, vinyl, asphalt, rubber, cork and linoleum.

Whatever material is chosen, it is important to follow the instructions of the manufacturer as to where the material can be used, type of sub floor, underlayment and adhesive to use and the care following installation. Some materials can be used below grade (basements), on grade (floor slabs laid directly on the ground) or above grade (suspended floors with air space beneath them as over a basement or crawl space). Others have more limited use.

Vinyl

Vinyl is made of vinyl resins, plasticizers, pigments, and fillers. Vinyl is expensive so that the higher the vinyl content the more expensive the flooring. There are three basic

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types of vinyl floorings--homogeneous or pure vinyl, available only in tile form; backed vinyl available in either tile or sheet form; and vinyl in combination with other materials such as asbestos, also available only in tile form.

The homogeneous vinyl tile is made throughout of pure vinyl. Standard sizes and gauges vary with manufacturer but all offer a tile 9 x 9 inches. Some companies list 1/8 inch as the standard gauge, others offer also 3/32 inch. Price varies with design but will be about 75 percent more than the least expensive backed vinyl in sheet form.

The backed vinyls have a wear layer of pure vinyl that has been applied to a backing either with heat or an adhesive. The backing may be asphalt saturated felt, cork or degraded vinyl or special alkali resistant material. Sheets are usually 6 feet wide, tiles 9 x 9 inches. Overall gauge is about 1/16 inch, but the wear layer is about one half of this. Cost will vary with design but will be substantially less than homogeneous vinyl.

Vinyl asbestos tile is as the name implies a combination of pure vinyl with asbestos fibers. The tiles are of the same material throughout, 9 x 9 inches in size and either 1/8 inch thick or 1/16 inch which is the service gauge.

The homogeneous and the vinyl asbestos tiles can be used anywhere. Backed vinyl can be used on basement and slab floors only if the backing is alkali resistant. Felt backed types can be used only on floors not in contact with the ground. For all installations it is important to follow the manufacturers directions for application.

There are printed vinyls also which are comparable in price and use to the familiar enameled floor coverings. These are made in different ways but essentially there is a printed layer of plastic impregnated material or vinyl over which is applied a thin wear layer of vinyl. The backing is usually felt.

Because of their smooth surface, vinyls do not show soil as much as more porous materials. In the Texas accelerated wear tests on resilient floor coverings, solid vinyl and rubber showed the least wear of any materials tested and the unwaxed samples showed less wear than the waxed samples. 1/ It would seem logical

1/ Stewart, B. R., Kunze, O. R., Hobgood, P. Accelerated Wear Tests on Common Floor-Covering Materials. Texas Agr. Sta. Bul. 890, College Station, Texas. 1958

then to recommend that solid vinyl floor not be waxed. One company in its current advertising has this to say about waxing vinyl floors: "In our opinion, vinyl floors do need occasional washing and waxing if you want them always to look their best. It's true that good quality vinyl floors are easy to care for. They need less frequent waxing, for instance, and when they are waxed only a very thin coat needs to be applied." 1/

Rubber

Rubber is available in both sheet and tile form but tile is the most frequently used in residential construction. Rubber tile is composed throughout of vulcanized rubber compound binder with reinforcing fibers, pigments and fillers. Until 1941 all rubber flooring was made from natural rubber. Since 1946 most rubber flooring has been made from synthetic rubber, and most from a general purpose synthetic known as SBR (styrene butadienne rubber). Flooring made of this compound has better oil and grease resistance than flooring made from natural rubber. Practically all rubber flooring is made in marbelized pattern and in a full range of color. Rubber can be used anywhere.

Rubber is noteworthy for its resistance to indentation and its underfoot comfort. It is easy to maintain but home-makers should be cautioned to use only a water soluble wax on it. Rubber is one of the materials that showed the least wear in the Texas study and the unwaxed samples showed less wear than the waxed samples. Only water base wax can be used on rubber.

The cost of rubber tile is about the same as the least expensive homogeneous vinyl tile and the alkali resistant backed vinyl.

Asphalt Tile

Asphalt tile is one of the cheapest of the resilient smooth surface floorings. The cost range is about the same as for thinner gauge linoleum. A great deal of asphalt tile has been installed in the last few years, perhaps because of its low cost, and ease of installation. Contrary to its name there is very little asphalt in any but the dark colored tiles. Asbestos resinous binders, plasticizers, and pigments are the ingredients. Grease resistant asphalt tile is a specially processed mixture.

Asphalt tile is available in a wide range of colors, plain or marbelized. Perhaps the greatest disadvantage of asphalt tile is its lack of resistance to indentation and the amount of care required to maintain an acceptable appearance. In the Texas study the waxed samples of asphalt tile tended to wear more than the unwaxed samples. Only water base wax can be used on asphalt tile.

Cork

Cork is available only in tile form. During the past decade the manufacture of cork flooring has changed principally in the addition of synthetic resin binders. The new type cork tile is more resilient and less porous than that formerly made.

Cork is a wood product, the outer bark of a species of oak tree. Excessive water will cause the cells to swell so caution must be used in its care. Cork tile with a vinyl protective coat and the newer resin-fortified wax finished tiles are easier to maintain than the older types. In general cork with its limitations on uses, and care needed in maintenance, is not as good a choice for the kitchen of the average home as are some of the other resilient floor coverings.

Linoleum

Linoleum is an old familiar material. It has been on the market almost 100 years and continues to have wide usage. Linoleum is made of drying oils such as linseed, resins, natural and synthetic, pigments and filler. The original filler for linoleum was cork but this has been largely replaced by wood flour. Linoleum is limited to use in areas that are dry. The burlap and rag felt backing is susceptible to moisture and fungus attack. If the manufacturers' instructions are followed for the use and installation of linoleum it will give years of satisfactory service.

There is a range in price depending on design and gauge but a good linoleum floor can be installed for less cost than any other material except asphalt tile. There are many colors and patterns. Because of the yellow color of the drying oil it is not possible to get as clean whites and pastel shades in linoleum as in vinyls but this difference is not apparent after some service. Plasticized vinyls tend to **pick up** stains and become darker with use but linoleum colors become lighter. Linoleum is available in sheet or in tile form. Foam rubber lining felt has been developed that is particularly effective under linoleum.

Cost of Floor Materials

Cost of resilient floor materials will vary with material and design. Installation cost is based on the condition of the sub floor and the amount of fitting that has to be done and will be about the same for all materials. The approximate price per square foot installed is given in the following table developed from data in the report of the 1958 Building Research Institute conference on installation and maintenance of resilient smooth surface flooring.

APPROXIMATE INSTALLED COST OF RESILIENT FLOOR FINISHES PER SQUARE FOOT 1/

MATERIAL	RANGE IN PRICE	AVAILABLE GAUGES
<u>TILE:</u>	(Dollars)	(Inches)
Asphalt		
Regular	0.20-0.50	1/8, 3/16
Greaseproof	0.25-0.55	1/8, 3/16
Homogeneous Vinyl	0.55-2.00	.080, 3/32, 1/8
Backed vinyl		
Regular	0.30-0.40	1/16
Alkali resistant	0.50-0.70	1/16, .080
Vinyl Asbestos	0.25-0.60	1/16, 3/32, 1/8, .080
Linoleum	0.25-0.70	.065, .090, 1/8
Rubber	0.45-0.90	.080, 1/8, 3/16
Cork	0.35-0.90	3/32, 1/8, 3/16, 5/16
<u>SHEETS:</u>		
Backed Vinyl		
Regular	0.30-0.50	1/16, .070
Alkali resistant	0.50-0.70	1/16, .080
Rubber	0.45-0.90	.080, 1/8, 3/16
Linoleum	0.25-0.60	.070, .090, 1/8

1/ National Academy of Sciences-National Research Council. Building Research Institute. Installation and Maintenance of Resilient Smooth Surface Flooring. Publ.597. Washington (25) D. C. 1958

COUNTER MATERIALS

The ideal counter surface would be one resistant to moisture, stains, alkali, acids, medicines, fats and oils, dry and moist heat. It would not be damaged by impact, or when used as a cutting surface. It would never lose its gloss or pattern and would not be affected by sunlight. In addition it would be quiet and comfortable to work on, be reasonable in cost and easy to install. As with floor covering no one material on the market meets all these qualifications but many that are available will give satisfactory service with proper use and care.

Laminated plastic is made of several sheets of special kraft paper impregnated with synthetic resins. The top layer carries the design and may be paper, fabric or a thin sheet of wood veneer. For the high pressure laminates the protective top layer is melamine plastic, the hardest and toughest of the plastics. For the low pressure laminates polyester is used. The stacked sheets are subjected to heat and pressure which bonds the layers together. The high pressure laminates are rigid whereas the low pressure may be either rigid or flexible. The low pressure type will show a burn scar if touched with a lighted cigarette whereas the high pressure will not.

Laminated melamine plastic is available in satin or gloss finish in sheets 24, 30, 36, and 48 inches wide and in 5, 6, 8, and 10 foot lengths--but not all lengths in all widths. There is a wide choice of designs and color. The sheets are bonded to a backing either on the job or at the shop. The counter edge can be of either metal or of self material. This latter finish is perhaps the most popular today. Pre-formed counters are factory fabricated and permit a coved backsplash and rolled front edging. This type of counter is more expensive than the self-edged or metal edged counter.

Contrary to popular opinion laminated plastic is not indestructible. It will dent and crack under impact, can be marred if used as a cutting surface, and will lose gloss with continued abrasion of sliding pans and abrasive cleansers. Since the effect of dry heat is not the same for all brands it would be wise to caution homemakers about placing anything as hot as a skillet, 420°, directly on the surface. Of the 8 types tested in the Ohio study, 3 showed no damage from dry heat of 382° for 20 minutes but all showed some change when subjected to 420° dry heat. Only 2 showed no effects from

moist heat but the effect on the others was not as severe as from dry heat. 1/

Low pressure laminates are not as durable as the high pressure ones. Care needs to be exercised in using them since they will scar and blister readily.

Vinyl

Sheet vinyl is more satisfactory for counter covering than vinyl tile since there will be fewer seams. Sheet vinyl is available in widths for economical counter installation but the wider widths used for flooring can also be used. Vinyl is flexible and can be molded for a continuous cove or back-splash. Because of the ease of handling--vinyl can be cut with scissors or sharp knife--it is a good material for the do-it-yourselfer. The manufacturers' directions should be followed for type of base and adhesive to use.

Vinyl provides a smooth, resilient, easily cleaned work surface in a variety of designs and colors. It is resistant to staining from most household solutions but some foods and alkaline medical supplies will leave stains. Most important to the homemaker is the effect of heat on vinyl. The Ohio study showed that there was damage from dry heat as low as 350° and some damage even from moist heat. The homemaker who knows this can protect her counter with heat resistant pads or plan to cover the portion of the counter near the range and the area where she is most likely to use electrical cooking appliances with some other material. A burning cigarette will fuse a vinyl surface.

Advise the use of a cutting board. Vinyl is easy to cut through and cuts do not heal as they tend to do in linoleum. Continued abrasion from sliding pans and abrasive cleaner will scratch the surface.

Linoleum

Linoleum was the most used covering for continuous counters until the advent of rigid laminated plastics. For many homemakers linoleum is still a good choice. Its advantages are that it is comparatively inexpensive, available

1/ Weaver, E. K., V.V.Everhart. Work Counter Surface Finishes. Res. Bul. 764, Ohio Agr. Exp. Sta., Wooster, Ohio. 1955

in a variety of suitable colors and designs. With care it will last for many years. Many of its disadvantages can be overcome by proper installation and care. It is most important to use a moisture proof adhesive for the area around the sink.

Linoleum counter surfaces should be protected with wax. Alkali makes linoleum porous so a minimum of soap and detergent should be used. Protect the surface with a cutting board and cooling racks or asbestos pads. Linoleum has fairly good resistance to heat but not enough so that hot pans can be placed on it directly from the burner.

Stainless Steel

Stainless steel is one material for counter tops that is not damaged by heat. Stainless steel is steel with a high nickel and chromium content. It is usually satin finished but can be highly polished. A complete stainless steel kitchen is a custom job with counters and sink in one piece without seams. Sheet steel for counter surfacing is, however, available and can be applied by the home workman.

Stainless steel is impervious to moisture, crack and chip-proof but will dent if the impact is great enough. Although the material is called stainless it does stain especially with acids and cleaning supplies. Most stains can be removed with rubbing alcohol. Some types of stainless steel show watermarks more than others. This particular characteristic seems to be the most distressing to homemakers. Cuts and scratches will show and it would be wise to recommend a cutting board for heavy cutting jobs. Homemakers should be cautioned that stainless steel will conduct electricity and there is always the possibility of serious shock from using electrical appliances on such a surface.

Ceramic Tile

Ceramic tile, a durable but expensive material for counter surfacing, either glazed or unglazed tile can be used for counters. The glazed has a non-vitreous body, usually white, and a face of colored vitreous glaze. Unglazed tile has a vitreous body and is the same throughout. Tile is available in a wide range of colors. Sizes vary from mosaic to custom but for counters the $4\frac{1}{4}$ x $4\frac{1}{4}$ inch tile is usually used. The conventional method of setting tile is in a portland cement base but new adhesives have been developed for tile setting which are faster and cheaper.

The advantages of ceramic tile are that it is impervious to moisture and resistant to heat, abrasion, stains and cuts. Its disadvantages are that it is noisy to work on and is not resistant to impact.

A ceramic tile surface is not a smooth surface. Grout between the tile will become dark with use and special care is needed to keep the tile surface in presentable condition.

Wood

Wood is rarely used today for the final finish of the entire counter area but built-in wood chopping blocks have become increasingly popular. Laminated hard woods such as maple, beech or birch are usually used. Wood stains readily and absorbs moisture, unless well sealed. It will scorch with temperatures of 382°. It is a good cutting surface because it does not dull knives as other surfaces do.

Hardboard

Plastic coated hardboard (made from wood chips bonded into a sheet by heat and pressure) is available in a variety of plain colors. Hardboard is easily applied, resistant to heat and burning cigarettes and fairly resistant to staining.

This is a relatively inexpensive material that can be applied by the home workman. Resistance to abrasion is low so surfaces need protection from hard usage and scouring.

OUTLOOK

Vinyl is the newest resilient floor material on the market. The variation in design possible with it is perhaps the most exciting thing in floor finishes today. Vinyl can be clear, translucent or opaque depending on the amount of coloring matter in it. There are tiles that look like marble and ceramic tile. Others sparkle with gold flecks. There are geometric cuts, custom sizes and decorative inlays from which to style unusual floors. Each season new designs are introduced.

Terrazzo patterns are popular at the present time. These are made by cutting up sheets of different colored vinyl into small pieces. A mixture of these pieces is then molded into sheets and cut into the desired tile sizes; for sheet material the chips are consolidated on a backing by hot pressing. A variation of this design is one that has uniformly cut pieces of opaque vinyl floating in a translucent vinyl which gives a three dimensional effect. One of the newer cork tiles on the market is made of large cork granules combined with vinyl. It is expensive and considered a luxury flooring.

You may find the following additional references helpful:

Flooring Materials--Small Homes Council Circular F4-6.
University of Illinois, Urbana, Ill. 1955

A Quick Guide to Flooring Materials--Changing Times-Vol.13
No. 11. Nov. 1959

Counter Surfaces--Small Homes Council Circular F9-1. University
of Illinois, Urbana, Ill. 1958

Materials for Work Counter Surfaces--Consumer Reports, March
1958. Vol. 23, No. 3.

Counter Tops for the Kitchen--Changing Times. Vol. 10, No. 4.
April 1956.

UNITED STATES DEPARTMENT OF AGRICULTURE
Agricultural Marketing Service

LEGUME AND GRASS SEED SITUATION AND OUTLOOK IN 1960

Talk by William R. Askew
Agricultural Economics Division
at the 37th Annual Agricultural Outlook Conference
Washington, D. C., 3:45 P. M., Tuesday, November 17, 1959

National Supply

The initial supply of 26 grass and legume seeds (1959 production plus carry-over on June 30, 1959) is estimated at 873 million pounds, down 42 million pounds from 1958 and 198 million below the average for the period 1948-57. While production of these 26 seeds was 43 million pounds larger in 1959 than in 1958 the decline of 85 million pounds in the June 30, 1959 carry-over as compared with a year earlier, more than offset the increased production. Imports in 1958-59 accounted for an additional supply of 42.1 million pounds, 26 percent below the average for the 1948-57 period. However, exports during 1958-59 were 38.6 million pounds, 7 percent below average.

Small-seeded Legumes

The initial supply of the 6 small-seeded legumes, including those used primarily for hay and pasture, (shown in the accompanying table) is indicated at 359 million pounds, about 7 percent below the supply in 1958-59. Most of this decline is in alfalfa seed for which production dropped 14.1 million pounds and carry-over dropped 8.5 million for a decline of 22.6 million pounds.

Production in 1959 and carry-over of alsike clover and sweetclover were both below the 1958 levels, and indicated supplies are 15 percent and 12 percent smaller, respectively. Larger crops than in 1958 of white clover and Ladino clover were harvested this year, but sharply smaller carry-over places supplies about one-seventh below last year. In contrast, supplies of red clover are 5 percent larger than a year ago.

Domestic disappearance of the 6 kinds of seeds in 1958-59 was 6 percent less than the average disappearance during 1948-57. In this comparison last season's use was above average for alfalfa, white clover and Ladino clover, but it was below average for alsike clover, red clover and sweetclover. The latter two kinds continued the long-time downward trend in usage. However, the combined domestic disappearance in 1958-59 of the two leading hay legumes -- alfalfa and red clover -- of 226 million pounds was about the same as during the average period.

Prepared in cooperation with T. J. Kuzelka, Agricultural Estimates Division, AMS.

Imports in 1958-59 of the 6 kinds totaled 15.4 million pounds, about half of the 29.5 million pounds imported during the 10-year average. The bulk of last year's imports -- 10.3 million pounds -- was sweetclover, and a similar quantity of this seed will be needed to supplement the current visible supply.

Exports of 16.3 million pounds in 1958-59 represented mostly alfalfa, and were considerably above the average of 12.6 million pounds.

Prices paid by farmers for seed purchased in mid-September 1959 were slightly higher than a year earlier for certified alfalfa, red clover, and Ladino clover. But prices were lower for non-certified alfalfa, alsike clover and white clover.

Grasses

The initial supply for 1959-60 seedings of the 12 grasses, at 230 million pounds, is one-fifth below the 290 million pounds available in 1958-59 but close to the average of 240 million. Most of the decline is the result of smaller supplies of Kentucky bluegrass, smooth brome-grass and Sudangrass. The 1959 production of Kentucky bluegrass is forecast at only 3.4 million pounds, a decrease of 88 percent from the previous year's production of 28.6 million and 82 percent below the 10-year average production. The drop in the supply of smooth brome-grass from the level of 1958 is due to a smaller production and carry-over. The sharp decline in Sudangrass seed is the result of a greatly reduced carry-over. Domestic disappearance of the 12 grasses in 1958-59 was 210 million pounds, 13 percent above the 186 million used domestically during the 10-year average period. If the domestic use in 1959-60 approximates the level of recent years, current supplies of red fescue, orchardgrass and brome-grass will need to be bolstered with imports. Other kinds in tight to short positions are Kentucky bluegrass and crested wheatgrass. Kinds for which supplies are in surplus positions include Chewings fescue, bentgrass and Merion Kentucky bluegrass. The latter kind is meeting strong competition from other improved strains, primarily Park and Delta.

Imports and exports of grass seeds were larger in 1958-59 than during the average period. Imports totaled 21.3 million pounds in 1958-59 and compare with the average of 18.9 million while exports were 13.8 million as compared with 10.8 million pounds. Actual exports of grasses last year were slightly larger than this but no allocation has been made of the 8.5 million pounds of "other grasses" exported. Based on past experience it is believed that most of the "other grasses" are ryegrasses which are discussed in the winter cover crops.

The 1959-60 prospective supply positions for several of the grass seeds were already reflected in the price paid by farmers on September 15, 1959. Retail prices on that date of timothy seed were lower than a year ago, but prices were higher for orchardgrass, redtop, Kentucky blue-grass, smooth brome-grass, crested wheatgrass and tall fescue. These changes may possibly indicate the price trend which may prevail into the 1960 spring selling season.

Winter Cover Crops

The initial supply of the 8 winter cover crop seeds is estimated at 284 million pounds, about a fifth above that available in 1958 but one-third below the average supply. Production of these seeds in 1959 was up 70 million pounds from 1958 with most of the increase in ryegrass, Austrian Winter peas and vetch. However, a part of the increase was offset by a decline in the carry-over of 23 million pounds. Domestic disappearance of winter cover crops in 1958-59 was 208 million pounds, considerably smaller than the average domestic disappearance of 253 million. Cover crop seeds which are in surplus positions in comparison with usage in recent years include common ryegrass, perennial ryegrass and Austrian Winter peas. The vetches are in ample supply, but crimson clover and lupine are in short supply.

Ryegrass production, including common and perennial, in 1959 is estimated at 136 million pounds, 49 percent above production in 1958, and 44 percent above the 10-year average. Production increases in each of the ryegrasses was offset by substantial declines in the June 30 carry-over which totaled only 22.8 million pounds in 1959 compared with last year's carry-over of 37.5 million pounds.

Imports of winter cover crops in 1958-59 totaled 5.4 million pounds, down substantially from the average of 8.7 million. Imports consisted almost wholly of crimson clover and lupine seed. No exports were reported for individual winter cover crops in 1958-59. However, it is believed that a large part of the 8.5 million pounds of "other grasses" exported in 1958-59 were ryegrasses. Exports of all winter cover crops during the 1948-57 average period totaled 17.9 million pounds of which 6.5 million pounds were ryegrasses.

Prices paid by farmers this fall for common ryegrass, Austrian Winter peas, hairy vetch and common vetch were lower than last year. But prices were higher for lupine, crimson clover and perennial ryegrass.

Table 1.--Prices paid by farmers for seed: September 15, and spring season average
(4-month average Feb. 15-May 15), dollars per 100 pounds clean seed, 1957-59

Kind of seed	Spring 1957	September 1957	Spring 1958	September 1958	Spring 1959	September 1959
	Dol. per cwt.	Dol. per cwt.	Dol. per cwt.	Dol. per cwt.	Dol. per cwt.	Dol. per cwt.
Alfalfa, Common	41.50	35.60	36.60	36.00	36.60	35.20
Alfalfa, Certified Northern and Central Adapted	50.50	41.30	42.80	41.80	46.80	45.10
Alfalfa, Certified Southern Adapted						
Clover, Red	36.80	33.50	31.30	30.60	30.10	32.30
Clover, Alsike	49.30	44.40	41.70	43.00	47.10	45.00
Clover, Sweet	48.00	41.10	34.60	36.30	35.20	35.40
Clover, White	19.00	---	16.70	---	17.40	---
Clover, Ladino	109.00	82.70	73.50	86.60	85.20	86.50
Clover, Crimson, Common	79.50	60.20	60.50	72.00	82.70	79.60
Clover, Crimson, Reseeding	---	25.50	---	28.80	---	30.90
Lespedeza, Korean	---	30.60	---	32.70	---	34.90
Timothy	14.00	---	12.20	---	12.10	---
Redtop	27.70	18.70	18.90	24.30	27.50	23.30
Bluegrass, Kentucky	71.00	57.80	49.00	50.70	52.40	55.70
Orchardgrass	94.90	80.30	74.80	68.30	60.30	70.40
Sudangrass	40.80	31.80	28.90	32.20	33.20	38.10
Bromegrass, Smooth	12.00	---	8.83	---	10.40	---
Wheatgrass, Crested	49.80	29.00	21.40	21.80	21.30	29.90
Fescue, Tall	58.50	37.60	24.50	28.00	28.20	39.70
Ryegrass, Common	23.10	19.50	---	21.10	21.80	26.60
Ryegrass, Perennial	13.80	9.50	13.40	14.80	16.80	12.00
Peas, Austrian Winter	---	18.00	---	21.00	---	22.30
Peas, Wild Winter	---	7.27	---	7.61	---	7.52
Vetch, Hairy	---	10.40	---	11.50	---	11.60
Vetch, Common	20.90	16.80	---	19.30	---	17.00
Lupine, Blue	---	9.82	---	11.00	---	10.30
Lupine, Sweet	---	4.46	---	5.91	---	6.49
	---	6.94	---	9.00	---	7.65

Table 2.--Prices received by growers for seed: Season average, dollars per 100 pounds clean seed, 1949-59

Kind of seed	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958 1/	Oct. 15, 1959
	Dol. per cwt.	Dol. per cwt.	Dol. per cwt.	Dol. per cwt.	Dol. per cwt.	Dol. per cwt.	Dol. per cwt.	Dol. per cwt.	Dol. per cwt.	Dol. per cwt.	Dol. per cwt.
Alfalfa	37.80	37.30	45.40	32.50	22.90	33.40	20.50	30.80	24.70	27.00	28.10
Red Clover	40.60	30.50	31.70	31.00	25.50	44.50	29.60	33.60	26.70	31.00	25.60
Alsike Clover	28.80	33.80	35.60	26.90	16.60	27.60	21.00	32.60	17.90	19.00	17.70
Sweetclover	14.80	11.80	9.81	9.32	9.19	11.10	9.53	9.40	7.64	8.45	8.18
White Clover	78.20	80.10	54.90	48.30	45.30	66.20	58.70	65.20	32.70	52.10	---
Ladino Clover	129.00	119.00	108.00	91.50	33.20	51.80	53.30	35.60	29.10	52.30	---
Lespedeza	6.83	8.77	12.00	18.10	18.40	19.50	7.84	10.30	8.04	8.02	---
Timothy	18.90	10.20	7.33	13.60	12.40	17.10	8.52	15.50	8.09	13.60	---
Orchardgrass	18.20	17.70	15.50	16.50	13.00	26.00	15.50	21.30	10.80	15.50	---
Redtop	42.00	34.30	23.30	37.70	51.30	56.20	36.10	42.90	19.50	22.60	---
Ky. Bluegrass 2/	9.20	11.30	9.31	12.50	15.50	14.10	9.62	12.10	6.95	6.53	---
Smooth Bromegrass	26.70	17.60	13.80	22.00	11.90	11.00	16.50	30.00	7.98	8.34	---
Crested Wheatgrass	24.40	15.50	26.00	33.80	15.30	18.20	21.40	36.20	10.90	11.00	---
Sudangrass	5.37	7.34	7.05	10.50	5.21	8.99	4.57	6.40	3.06	4.74	---
Chewings Fescue	33.90	49.70	66.50	47.00	43.00	25.00	19.00	32.00	29.50	32.00	---
Red Fescue	39.20	51.90	69.30	48.30	41.30	25.50	22.30	42.30	36.30	33.10	---
Tall Fescue	43.50	40.80	50.90	25.40	12.50	15.40	9.17	13.10	10.00	11.30	---
Bentgrass	63.70	67.50	81.50	52.80	61.10	54.90	46.10	43.60	24.30	23.10	---
Hairy Vetch	16.10	15.10	14.90	13.50	11.50	11.20	13.30	13.90	9.87	10.40	---
Common Vetch	8.81	6.40	6.45	5.51	4.17	4.82	6.00	8.57	5.05	5.72	---
Purple Vetch	8.50	6.01	8.00	6.20	5.20	4.50	9.00	6.50	5.60	7.60	---
Common Ryegrass	9.70	7.50	9.00	6.70	8.90	7.00	5.60	4.75	4.40	7.80	---
Perennial Ryegrass	13.30	12.50	13.60	9.40	11.60	13.00	9.40	7.00	5.10	9.30	---
Austrian Winter Peas	4.36	4.47	3.61	3.10	2.65	2.61	3.32	3.20	2.26	3.50	---
Lupine	4.53	4.52	4.54	3.85	3.45	4.92	4.68	5.07	4.28	4.52	---
Crimson Clover	20.70	32.70	27.80	21.10	15.70	19.30	23.90	26.40	19.30	21.60	---

1/ Preliminary.

2/ Kentucky Bluegrass prices are for cured seed.

Source: USDA -- Crop Reporting Board.

LEGUME AND GRASS SEEDS: INITIAL SUPPLY, IMPORTS, EXPORTS AND DOMESTIC DISAPPEARANCE, AVERAGE 1948-57, ANNUAL 1958 and 1959

Kind of seed	PRODUCTION			TOTAL CARRY-OVER			INITIAL SUPPLY			Imports $\frac{1}{2}$			EXPORTS $\frac{1}{2}$			DOMESTIC DISAPPEARANCE		
	Average	1948-57	1959	Average	1948-57	1959	Average	1948-57	1959	Average	1948-57	1959	Average	1948-57	1959	Average	1948-57	1959
	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds
Alfalfa	112,012	152,040	137,947	42,257	61,316	52,789	184,269	213,335	190,736	6,276	331		7,913	10,502		135,949	150,426	
Red Clover	88,722	71,925	78,462	27,473	23,418	21,497	116,195	95,343	99,959	3,810	1,918		2,483	*		89,059	75,764	
Alsike Clover	12,091	8,940	6,635	4,739	7,310	7,142	16,830	12,777	13,777	2,194	2,591		1,078	*		12,800	11,287	
Sweetclover	46,224	26,431	25,560	15,619	19,317	14,773	61,844	45,750	40,333	15,791	10,358		30	*		60,448	41,333	
White Clover	4,253	3,131	4,685	1,239	4,178	1,684	5,492	7,309	6,369	1,194	174		356	*		4,734	5,799	
Ladino Clover	6,261	4,235	4,992	8,316	4,715	2,395	14,577	8,950	7,387	276	58		1,020	1,570		5,088	5,043	
Total 6 Legumes	299,563	266,702	258,281	99,643	120,284	100,280	399,207	386,986	358,561	29,541	15,430		12,578	16,314		308,078	289,652	
Timothy	37,760	25,130	37,536	12,609	11,556	3,186	50,369	36,686	40,722	2,811	716		3,186	3,046		38,832	31,170	
Orchardgrass	11,150	14,740	8,285	3,741	4,488	4,249	14,891	19,228	12,534	3,513	4,266		443	384		14,234	18,861	
Redtop	5,421	3,070	3,260	2,294	1,385	1,379	7,715	4,455	4,659	7	0		778	1,225		4,854	2,651	
Kentucky Bluegrass	18,786	28,610	3,440	5,539	12,233	19,045	24,325	40,843	22,485	489	1,968		1,331	2,203		17,427	21,583	
Merion Bluegrass	21,062	1,591	2,342	2,331	418	568	21,228	2,009	2,910	0	0		0	**		21,980	1,441	
Cheviings Fescue	4,826	5,880	9,600	2,263	1,857	1,914	7,737	7,134	11,514	531	6		21,200	1,478		5,079	4,351	
Red Fescue	2,272	2,755	4,260	2/2,338	3,033	4,172	4,376	5,788	8,432	4,565	12,160		2/2,925	14		6,349	13,762	
Tall Fescue	25,271	26,018	20,595	12,047	5,409	6,061	36,113	31,427	26,656	0	30		2/2,824	***		24,153	25,396	
Bentgrass	3,480	6,152	7,050	1,351	4,474	3,260	4,830	10,626	10,310	88	3		2/2,600	3,712		3,065	3,657	
Smooth Bromegrass	13,548	9,050	3,610	5,416	23,610	11,985	18,964	32,660	15,595	6,736	2,092		2/2,880	**		17,922	22,727	
Crested Wheatgrass	3,658	1,925	1,970	1,044	7,225	2,570	4,702	9,150	4,540	127	81		2/2,442	***		2,962	6,661	
Sudangrass	54,288	33,052	37,849	11,178	56,423	32,000	65,466	89,475	69,849	75	0		2/4,473	**		49,758	57,475	
Total 12 Grasses	181,522	157,973	139,797	60,151	132,111	90,389	240,107	290,084	230,186	18,942	21,282		10,782	3/		185,615	209,715	
Austrian Winter Peas	68,450	29,800	50,800	56,276	4,384	1,908	124,725	34,184	52,708	0	0		2/4,067	0		46,726	32,276	
Crimson Clover	19,105	17,215	12,552	2,548	1,444	2,213	21,653	18,659	14,765	4,751	2,954		2/1,000	0		23,686	19,400	
Lupine	47,072	10,350	10,025	34,265	1,454	627	81,337	11,804	10,652	164	2,242		2/728	0		35,149	13,419	
Heiry Vetch	36,703	17,885	25,365	14,822	8,953	5,407	51,555	26,838	30,772	368	0		2/446	0		36,187	21,431	
Common Vetch	16,076	5,370	5,760	1,316	2,509	1,316	24,651	7,879	7,076	1,301	4		2/4,105	0		14,711	6,563	
Purple Vetch	7,908	6,600	8,100	1,634	2,972	1,265	9,676	9,365	9,365	26	0		2/1,983	0		7,170	8,307	
Common Vetch	75,303	63,360	98,000	19,544	21,309	13,361	94,848	84,669	111,361	226	0		2/4,712	**		72,263	71,308	
Perennial Ryegrass	18,802	28,080	38,000	4,508	16,176	9,408	22,859	44,256	47,408	1,890	176		2/1,750	**		17,499	35,024	
Total 8 Winter Cover Crops	289,419	178,660	248,602	142,172	59,201	35,505	431,274	237,861	284,107	8,700	5,376		17,891	3/		253,391	207,728	
Grand Total 26 Crops	770,504	603,335	646,680	301,966	311,596	226,174	1,070,588	914,931	872,854	57,183	42,088		41,251	38,603		747,084	707,095	

1/ July 1 thru June 30.

2/ Short-time average.

3/ Not available.

* Included in "Other Clovers". Total of 3,830,000 pounds.

** Included in "Other grasses". Total of 8,488,000 pounds.

*** Included in "Other fescue". Total of 2,539,000 pounds.

UNITED STATES DEPARTMENT OF AGRICULTURE
Agricultural Research Service
Institute of Home Economics

MODERN HOME LAUNDRY EQUIPMENT

By R. Katherine Taube, Household Equipment Specialist

Today we are going to approach laundry equipment from the aspect of availability, and discuss some of the problems involved in making choices when purchasing.

A separate WASH DAY is no longer a necessity, and daytime or nighttime, rain or shine, the laundering may be done if the homemaker is equipped to do it. But she has many decisions to make in selecting laundering equipment.

What is the necessary equipment? A mechanical washing device, for instance? We have come to think so, in our present culture, and surely it is an energy-saving and time-saving appliance.

NON-AUTOMATIC WASHERS

The simplest of the motor driven washers is the agitator wringer machine, in which anything washable of reasonable size may be washed. The wringer will have a release, for safety sake; the tub will have a gravity drain; there will be controls to turn the washing mechanism and wringer rolls on and off, and there will be casters so the machine can be easily moved.

Where the water supply is limited and several loads need to be washed in the same water, as a conservation measure, a wringer washer, or a spinner-type washer is a solution.

Such a simple machine is available on the market today, but while looking for it the prospective buyer is likely to be confronted with such a variety of washers and such a barrage of advertising

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claims as to make her wonder how an intelligent choice can be made.

Agitator wringer washers have wringer rolls large and soft, or one soft and one hard. The wringer will have either adjustable or compensating tension to take care of items of varying thickness. The wringer will be usable in several different positions. A drainboard below the wringer automatically takes care of the direction the water should run into the tub as it is extracted from the clothes. The agitator itself usually can be removed easily for thorough cleaning of the tub.

To these minimum components of the washer may be added a pump and hose to remove the water from the tub rather than have it drain onto the floor on into a bucket--and the advertising literature stresses the pump's fast action. When the pump is used to empty the water into a tub attached to the house drain, the laundry floor is likely to be drier and less hazardous, and compared to using buckets, the pump saves a great deal of labor.

Two types of timers are available for conventional washers: one signals when a preset time has elapsed; the other, necessarily more expensive, stops the machine at the end of a preset time.

A variety of agitator designs are available, sometimes within the same make. In our study of washing machines several years ago we found agitator machines among the poorest and among the best in washing ability. We cannot help but wonder why one manufacturer will use 3 agitator designs in his own line, when differences in performance are difficult for the buyer to judge. The saving grace of the situation is that probably whatever washer is purchased, the user has enough aids at hand to achieve the desired results. If she isn't satisfied with her first attempts at laundering, she may try any or all of the following things: softening the water; soaking the clothes; raising the water temperature if fibers permit; washing smaller loads; using more, less, or a different detergent; and reasonably increasing the washing time. We have found all of these to improve soil removal.

In some machines lint may be filtered out of the water during the washing period through an attachment atop the agitator. In some others a strainer device to place on the rim of the tub is provided. This filters out lint when the

pump is operated during the agitation of the wash if placed at the spot where the water enters as it is pumped back into the tub. The same system can be used during a machine rinsing of the clothes; it is claimed to give more turbulence to the water, and, of course, could be used for that purpose without the lint filter.

There are several kinds of wringer safety releases on the market; some stop the mechanism when the fabric going through the wringer is given a backward tug; others are activated by bars reachable with a flick of the hand. Before purchasing, the homemaker should try these to see exactly how they work. One manufacturer is making the wringer open at the top so anything that wraps around the roll is easily seen. Another is putting spots of color into the wringer roll so its motion can be more easily seen. A third provides a hose attachment which runs up to the wringer and allows clear water to do a partial rinsing of the fabrics just as they go through the wringer. As with agitators, one manufacturer may have more than one kind of wringer to offer. Theoretically the thicker, softer rolls aren't as damaging to buttons and other fasteners as thinner, harder rolls. Safety features and ease of operation should influence the choice.

The spinner-type washer has two tubs, one for washing and one for extraction of the water, and is necessarily more expensive to purchase than the wringer washer. The extractor tub may be used for rinsing in some models where provision is made for injecting the water into the tub and through the clothes. The spinner extractor is kinder to all sorts of trimmings and fastenings than the wringer, and extracts water from some washable ~~which~~ will not go through the wringer. All will agree it is less hazardous to use than the wringer. To avoid vibration when the extraction is taking place, the basket must be carefully loaded, especially if it is only partly filled. Tests in our laboratory showed that the spinner extracts more water than the wringer.

A double hook on the side of the tub, on which the electrical cord may be looped out of the way, and a hook for the lid, if the lid is not attached to the machine, are conveniences which may be worth a little extra cost.

Some of the casters should lock to keep the machine stationary when in use, because few floors are perfectly level. Machines equipped with 5 casters distribute the load better than the usual 4. For the person shorter or taller than average, washer legs providing adjustable heights are an advantage.

Some manufacturers make quite a point of having a double-walled tub so water is kept warmer than when the single-thickness tub is used. Since there is considerable decrease of water temperature in successive loads, this feature should be evaluated in terms of how many loads will be washed in the same water, and how important it is that temperature be maintained.

A few agitator machines are available with two speeds of agitation, the slower to take care of delicate fabrics and the faster for sturdier clothes.

There are on the market two wringer washers which differ markedly from others. One has two washer tubs mounted with a wringer between, so washing and rinsing may be done mechanically at the same time. However, the manufacturer recommends use of the first tub for a lukewarm, sudsy, agitated soak, the second tub for a very hot, mildly-sudsed wash, then rinsing in a separate tub--all to get the washing done in a hurry.

The second of these washers takes up a space 16x16x32 inches, has a water capacity of 8 gallons, and washes a 5-pound load. An impeller in the side of the tub aerates the water and moves the clothes about to accomplish the washing. The manufacturer claims that it "washes cleaner and faster than any other washer." Although it was not a washer included in our study, we had one in the laboratory a few years ago and did not find that it quite lived up to this claim.

There are many choices on the market, but, as you see, not too many added features for the conventional washer. It is the simplest to operate, but needs more of the homemaker's time than any of the other washers. All-in-all, it is apt to require the least servicing of all the mechanical washers, since it has a fairly simple mechanism. Most manufacturers of these machines have been in the business for many years and have had the time and experience to improve their products.

SEMI-AUTOMATIC AND AUTOMATIC WASHERS

The washer next in line as far as convenience and complexity of mechanism is concerned is the semi-automatic. The American Home Laundry Manufacturers' Association defines it as, "A power-driven device for washing fabrics, which performs filling, washing, rinsing, and water extraction functions without the user's removing the fabrics, but which requires that one or more of the operations be controlled by setting controls after the original setting."

Since the semi-automatics and the simplest of the automatics have similar features, I am going ahead with the discussion of the automatic washers. It is in these that the most versatility is encountered, and that the most special features are offered.

Let us consider first what is desirable to have in the basic automatic machine:

1. A washer tub that will hold at least a 6-pound load.
2. A choice of water temperatures for washing and rinsing.
3. A choice of washing times.
4. Provision for rinsing.

There are several washing actions to choose from among washers which provide these basic functions. Again going back to our experience in the study of washing machines, we found no one type of washing mechanism was consistently superior in soil removal. Choice of a particular washing action may of necessity be made on the basis of past experience of the buyer or on recommendations of friends or neighbors.

Installation Features

There are a few generalizations about installation which apply to most modern automatics.

Most washers, and dryers too, are designed for flush-to-the-wall installation. For this arrangement the hot and cold water pipes and the drain pipe must be confined to that space behind the washer. It also means the hot and cold water faucets cannot be reached to turn off after each use, as most manufacturers suggest, in order to take pressure off hoses and valves. This could be accomplished if the fixtures can be reached through a door from the other side of the wall or turned off on the floor below. In some installations the pressure may not be great enough to be harmful, but in others it may be high enough to damage parts of the washer if the water is not turned off after each washing. We do not have a figure to quote on the pressure that may be damaging, but we have been told by reliable persons that it is far safer to turn off the water after use, thus confining the pressure to the household system, than to rely on the hoses and valves in the appliance to withstand its force. If you wish to know what the pressure is in your home, the local water company will check it, or there are threaded pressure gauges you may screw on a threaded faucet to check it yourself.

Water pressure may also be a factor to consider when deciding on a washer, because of the way the filling of the tub is controlled. The pressure fill allows the washing action to start only when the desired water level has been reached. The timed fill may not allow enough water to flow into the washer if the water pressure is low. Some washers have a metered fill which is not dependent on pressure or time.

Need for bolting down has been eliminated by balancing devices in the washers themselves, or some type of automatic mechanism which stops the spinning of an unbalanced load.

Operation and Design Features

Beyond these installation generalizations, operation and design features are many.

In many current lines of washers are models with a completely separate, less vigorous, sometimes shortened cycle for the washing of man-made fibers, and delicate garments. This cycle often provides a choice of cold water for washing and rinsing. If the washing includes many delicate items with construction features which the regular action would be hard on, the cycle including a slower agitation speed may be worth the extra investment. In our laboratory we found very little difference in wrinkling between fabrics from the regular and from the reduced speed of operation. However, a shortening of the spinning time to one-third that normally used always brought about some reduction in wrinkling in the fabrics we were using. This reduction of spinning time could, of course, be controlled manually rather than automatically. With the advent of thermoplastic fibers a cool wash and rinse have been found to minimize their wrinkling.

Automatic home washers are engineered so that any part of the entire cycle may be skipped or repeated. Washers for laundromat or commercial installations are usually made with a fixed cycle.

On some washers a soak period is a regular part of the cycle. A soak is possible in any washer by managing it as a manual process.

Many washers have an arrangement which removes heavier-than-water particles that settle to the bottom of the tub, so these particles are not recirculated through the clothes. This might be of special interest to those washing children's play clothes, men's work clothes, or other things which might have sand and heavy dirt in them.

Several washers have special arrangements for removing lint. The lint filter also can be used in some washers as a detergent dispenser, since the water circulates through it.

One machine has a setting for no-spin, so garments may be removed from the washer for drip-drying. On the assumption that it will minimize wrinkling another washer pumps out some wash water and pumps cool water into the tub several times in order to cool the water and the clothes before they spin. We investigated this procedure in our study of using mechanical equipment for the laundering of present day fabrics, and although our results weren't too decisive, we believe the process has possibilities, and it could be used manually with other washers than the one on which it is an automatic feature.

There is a great movement afoot to simplify the selection of the combination of wash and rinse temperatures, wash and spin speeds, cycle time, and such, so manufacturers are offering "program computers," fabric formulas, pushbuttons, dials, alphabetical choices to make the machines versatile and more attractive to the buyer. How much this convenience is worth to the user is a matter of conjecture. Automaticity, however, is more expensive, takes more parts, and adds to the possibility of more repair bills.

The control panels of the more complicated models are usually completely lighted so they are easy to see in a dark place. In some this lighting is a part of the on and off cycle, so that the light is on when the machine is in operation, and off when the cycle has been finished, or stopped for another reason. On others there is a simple light with an on and off switch that the operator controls.

Many machines have effective, quick braking to end the spin. This is a safety measure, and a time saver. There is a difference in the speed of spinning among washers. Generally the faster spin extracts more water from the clothes, although length of spin also is a factor. If a dryer is to be used, the amount of moisture left in the clothes is an important consideration in determining the cost of dryer operation.

Top-loading washers which have a lid hinged at the side rather than at the back allow the controls at the back to be easily reached. One washer has this lid counterbalanced so it will not bang shut. All action stops in some machines when the lid is lifted, a safety device especially important if there are children about.

Many manufacturers have a sudsaver model for which a laundry tub is necessary close by to hold the water until it is used again. Some washers have the good feature of automatically adding fresh hot water to make up any amount short as a result of this tub to tub transfer.

Brief instructions for use are given on the inside of the lid in permanent form in many washers. This makes it possible for a user to be readily informed, and also insures that a second owner will have at least minimum instructions. So often the user of a second-hand machine does not receive the instruction booklet from the first owner.

For quite a few washers a base with easy-rolling casters can be purchased to make a regular automatic washer portable. One such portable was pictured being used at the bathroom lavatory. My experience has been that it takes quite a good-sized, deep basin for the drainage of an automatic washer, especially from the wash cycle, where a head of suds is likely to be built up by the force of the pumped-out water. It seems more logical to have the bathtub used for the drain-away water, if the portable washer is to be used in the bathroom.

Although instruction books and laundry manuals give guides for weight of articles in clothes loads, on one washer the open door may be used as a scale to indicate the load size.

In some washers it is possible to adjust the fill of water to match the clothes load. In others the same amount of water is used for loads of all sizes. If the part fill feature is called a water saver, don't confuse it with the sudsaver, which provides for the reuse of sudsy water.

The tub in which the actual washing is done is almost always of porcelain enamel, although a few are of stainless steel or aluminum. Some washers have porcelain enamel cabinets, but more often only the top is porcelain enamel, and the finish of the rest of the machine a baked-on enamel. A durable finish for the top is especially desirable if it is used as a work surface.

I haven't forgotten the dispensers on the washers. Some take care of any many as four different laundry agents. These may be helpful gadgets to have for dispensing detergent, water softener, or fabric softener, and as with all attachments, as long as they work they are fine. Not too much permanent damage is done if they do not work now and then--if the softener gets in where it doesn't belong, or doesn't get in

where it is supposed to. But when it comes to liquid bleach, let's take a long, long look.

This year several washer manufacturers are making an advertising point of their bleach injector feature. In most models the bleach dispenser provides for a single application of bleach. The operator pours a measured amount of the liquid for the one washing into the container, from which it is automatically diluted before it is added to the washing process.

Some dispensers hold enough bleach for many applications. Since the dispenser is an automatic device, we must not overlook the possibility that it may fail to function properly. The hazard to fabrics of overdoses from such a reservoir of bleach are fairly obvious. Dr. Labarthe, speaking at the Home Laundry Conference of the American Home Laundry Manufacturers' Association in October pointed out the danger of making it so easy for the homemaker to bleach that she is apt to bleach mixed loads, with undesirable results.

Research reported by American Cyanamid Company has shown that a liquid bleach is most effective if added several minutes after the detergent has been added and the washing action has started. This insures that both the whitener and the bleach will be effective, since it gives the fluorescent material in the detergent time to affix itself to the fabric, where it is less vulnerable to the chlorine. Dry chlorine bleach does not present this problem and can be added at the start of the washing process along with the detergent. The dry bleach contains its own brightener, which is compatible with chlorine.

AUTOMATIC CLOTHES DRYERS

Let's go on to clothes dryers next. I am going to treat gas and electric dryers together, since so many manufacturers make them exactly alike except for source of heat.

Most of the features that have been on dryers for the past years are still available. There are dryers which may be installed in a big, airy room without venting, or they may be vented from left, right, or the rear to the out of doors. There are condenser types, from which the warm, moist air is directed into a stream of cold water which condenses the moisture and washes the lint down the drain. In this type the air is reheated and used over and over again, but the water goes down the drain. The water used in this system must not be overlooked as an added operating expense.

A dryer is available which can be set to dry clothes to a desired moisture content--that is, dry enough to put away, or ready to iron. The dryer stops when the selected dryness has been reached. Some dryers have a bell or light which signals when the drying cycle is completed.

Rated wattage of electric dryers varies, and is also dependent on the voltage supplied. Many manufacturers supply dryers to operate either on 115 or 230 volts. The 115-volt installation usually operates with 1/4 as much wattage as the 230-volt, therefore, takes a much longer drying time. Either should be operated on an appliance circuit for its exclusive use. Operation of the two is similar in cost.

Gas dryers are available for different types of gas supply; the main burner must have an orifice appropriate for the type of gas used. Gas dryers are available with constant pilots or automatic electric ignition. Electric ignition, although initially more expensive than a pilot, may actually save enough on gas used by the constant-burning pilot to pay for itself in a few years of use. It is, however, another feature to get out of order. There is a trend recently toward making the gas burners accessible from the top rather than the back of the dryer, for easier inspection and servicing.

A range of temperature settings is fairly common on today's dryers, although some manufacturers still use a single setting. Sometimes the range of settings is in terms of fabrics or types of articles, rather than an indication of temperature. A safety thermostat, or similar device, operates separately from the one controlling the drying temperature.

One manufacturer has changed the usual tumbling from top to bottom to a criss-cross tumbling by redesigning the baffles; it is claimed that this makes faster drying possible.

Most dryers on the market this year continue to tumble without heat for a few minutes (sometimes 5, sometimes 10) at the end of the drying period. This is to cool the fabric, and is especially useful for the thermoplastic, man-made fibers, which tend to lose more wrinkles with this treatment than if tumbling is stopped while they are quite hot. We found that cooling was accomplished fairly well in a 10-minute period of tumbling without heat. Cooling for 20 minutes gave no better results as far as removing wrinkles from fabrics was concerned. Of course prompt removal of fabrics from the dryer is necessary to keep new wrinkles from forming.

Ultraviolet or ozone lamps placed in the dryer to give, as one manufacturer puts it, "the sweet, fresh smell of summer sunshine all year long" are of dubious value, but take very little current, so it probably makes little difference whether one is or isn't in a dryer. Another device on a dryer is a fabric refresher, which provides a container for pellets of 3 different scents to add to the air being circulated over the clothes. Another manufacturer provides an aerosol container with an air refresher substance which is added to the air during drying by pushing a button which releases the mist.

As with washers, some dryers can be purchased with porcelain enamel tops.

Some doors are hinged at the bottom rather than at the side. Some of these allow 3 different door positions: a part-way opening to make a loading chute for the clothes; horizontal opening to make a shelf; or complete 180° opening so the door is entirely out of the way. Side opening doors sometimes open the full 180° also.

For opening the door some dryers are equipped with a toe latch, some have pressure-sensitive doors which open if you push on them, and others have latches that can be worked with the knee. All these are helpful when loading the dryer, because both hands are apt to be full of clothes.

A fairly new feature, and a good one, is the safety door which will open from inside when pushed. This is no doubt in response to incidents where children have crawled into a dryer or have been pushed into it by another child. Most dryers stop when the door is opened.

Several dryers have a sprinkler attachment which dispenses a spray of water over a tumbling load of dry clothes to dampen them for ironing. The location of the dryer in relation to other household activities, especially the ironing, and the amount of sprinkling to be done might determine the convenience of this item. If ironing is to be done soon after drying, it appears that it would be better management to remove articles from the dryer with the right moisture content. Of course, this isn't always possible.

There are times when a heated space for drying a few things without tumbling would be convenient, and one manufacturer provides a rack to be attached inside the drum. A special setting provides air circulation with or without heat.

A companion to the small washer mentioned earlier is an electric dryer of the same size, 16x16x32 inches. It does not tumble the clothes in a drum but dries by a pulsating flow of warm air which floats the clothes in the dryer cabinet. It is made to operate on the 115 or 230 volt circuit.

COMBINATION WASHER-DRYERS

By far the most mechanically complicated piece of laundry equipment in home use today is the washer-dryer combination, which takes care of the whole process without handling of the clothes between washing and drying. The appliance can be used for either washing or drying alone. All combinations at present are of the front-loading, cylinder type. The chief claims for the combination are in space saving, because the one piece of equipment which does both jobs takes up less floor space than a separate washer and dryer, if both are set on the floor, and some saving of time and energy of the user, since the controls can be set for drying to automatically follow the washing, and the clothes need not be moved. The manufacturer who designed a washer and a dryer to stack one on top of the other has also provided the two facilities using a minimum of floor space, and both washing and drying can be carried on simultaneously.

Some combination models are designed to be built under the counter, and one is meant to be part of a continuous counter arrangement with a separate back-splash installation. For these machines the controls are on the front rather than at the back.

Combinations are available which are provided with a water heater to help maintain the water temperature during washing, or even to raise the temperature a small amount. Some have the dispensers for laundry supplies similar to those described for the individual washer.

One manufacturer of combinations claims his washer gets more water out during the final spin than do other combinations, so clothes dry faster. In another combination the dryer preheats during the final spin of the wash cycle, so that drying starts a little sooner. Poor water extraction has been a problem with combinations; this situation contributed to lengthening the drying time, which then made washing and drying a long process. At the Laundry Conference a representative of one manufacturer stated that "a really up-to-date combination of today extracts as much water as a separate washer will; turns the clothing into the drying end of the combination with as little water retention as would a separate washing machine." So maybe this problem has been solved.

As with separate units, dryers of these combinations, if heated electrically, are sometimes of the condenser type, so moisture from them is no problem. Otherwise precautions about venting for operation in a small room should be observed.

It should be remembered that the total life of the washer-dryer is going to be determined by the life of one of the units, whichever is beyond repair first. This may or may not be a shorter time than the life of the separate washer and dryer. If the two had been purchased separately, replacement of both might be unnecessary. This is an economic consideration for many families.

Another economic consideration is original cost. The combination is a deluxe piece of equipment and should not be compared with the cost of the simplest washer plus the simplest dryer. The convenience of the deluxe features must then be evaluated in terms of greater cost.

OUTLOOK

Even in this detailed presentation some appliance features have been omitted. We can't overemphasize the necessity of looking for basic features and deliberating carefully the value of additions, often sales-g geared rather than user-demanded.

Looking at the market today, it does not seem that the trend is toward simplification. Yet at the Parts and Service Conference of the American Home Laundry Manufacturers' Association this September there was a great cry for simplification. Speakers asked specifically for such things as:

1. Simplicity in design.
2. Each manufacturer to limit his production to one basic model, with the line expanded by adding proven features.
3. Changes in models only when actual technological advance is incorporated, rather than annual face-lifting.
4. Machines engineered for easy servicing, preferably from the front.

Such a program would make it easier to select an appliance, easier for the dealer to maintain his stock of appliances, and make servicing less difficult and in the long run less necessary.

UNITED STATES DEPARTMENT OF AGRICULTURE
Agricultural Marketing Service

NATIONAL ECONOMIC SITUATION AND OUTLOOK FOR 1960

Talk by Nathan M. Koffsky
Deputy Administrator, Economics and Statistics
at the 37th Annual Agricultural Outlook Conference
Washington, D.C., November 16, 1959

The outlook for 1960 is for higher rates of economic activity and employment than the records established just before the steel strike. Total consumer incomes, which in mid-1959 were some 7 percent larger than a year earlier, may increase another 4 or 5 percent by mid-1960. Even with continued substantial growth in population and the prospects that consumer prices will average slightly higher next year than this year, we expect per capita purchasing power of the average consumer to increase some further in 1960. As of mid-year 1959, per capita purchasing power averaged 5 percent above a year earlier and more than 20 percent above the level of 10 years ago.

From July on, the steel strike and its attendant effects brought some reductions in industrial production and employment and in the flow of income in the economy. The declines overall were relatively small and most economic indicators remained well above the levels of 1958. The strike had little impact on consumer markets, particularly the demand for food.

Meanwhile, confidence generally remains high that the upward trend in the economy, which got underway in the spring of 1958, will be resumed now that steel operations are rising. In fact, the outlook for 1960, particularly for the first half of the year, has been strengthened further by backlogs of demand built-up during the strike period.

Growth in the economy was fairly rapid to the middle of this year, proceeding at a rate roughly comparable to the expansions which followed the earlier post-war recessions. Gross national product in constant prices rose 10 percent between the second quarter of 1958 and the second quarter of 1959, and at that time was 5 percent higher than the peak rate attained before the recession in the fall of 1957. Reflecting the slow down caused by the steel strike, real gross national product in the third quarter of this year declined between 1 1/2 and 2 percent from the second quarter. Employment had risen to a new high in mid-1959. Despite a substantial increase in the labor force, unemployment was reduced to less than 4 million persons compared with over 5 million unemployed in mid-1958. Employment, however, rose much less than economic activity, reflecting a longer work week and, as has usually occurred in recovery from recession, a very substantial improvement in productivity per man hour. More recently, employment in some durable goods industries has declined as supplies of steel were reduced. Nevertheless, in September, total employment was still some 1.7 million higher than a year earlier and unemployment, declining seasonally, was 3.2 million, some 900,000 less than in September 1958.

The general price situation has been fairly stable over the past year. The BLS index of wholesale commodity prices in September was only slightly above the level of a year earlier--the net outcome of declines in prices of farm products and processed foods and a somewhat higher level of prices of industrial commodities. The BLS index of consumer prices and the AMS index of prices paid by farmers for family living items showed increases of about 1 percent over September 1958, again with lower retail prices of foods partly offsetting price increases elsewhere. The persistent rise in charges for services, such as medical and personal care, continued over the past year.

We turn now to the major forces which have shaped the economy in the past year or so, keeping in mind that in the first part of the period the economy was recovering from recession, while the most recent quarter reflected the effects of the steel strike. Table 1 summarizes the marked increase in expenditures from the main sources of demand--consumers, business and government--which occurred between the second quarter of 1958 and the second quarter of 1959. Also shown are the changes in the most recent quarter.

Table 1.- Gross National Product

	2nd quarter 1958 <hr/> Bil. Dol.	2nd quarter 1959 <hr/> Bil. Dol.	3rd quarter 1959 <hr/> Bil. Dol.	Change 2nd 1958:2nd 1959 to : to 2nd 1959:3rd 1959 <hr/> Bil. Dol.	
Gross National Product	<u>434.5</u>	<u>484.5</u>	<u>478.6</u>	<u>+50.0</u>	<u>- 5.9</u>
Personal consumption expenditures	290.9	311.2	313.3	+20.3	+ 2.1
Private investment	52.5	75.7	66.9	+23.2	- 8.8
Government purchases of goods and services	91.1	97.7	98.4	+ 6.6	+ 0.7

(Seasonally adjusted annual rates)

Source:

U. S. Department of Commerce

Between the second quarter of 1958 and the second quarter of 1959, the flow of expenditures in the economy increased some 50 billion dollars, with demands up substantially in each of the major sectors. Consumer expenditures rose 7 percent. Private investment outlays, where much of the 1957-58 recession was concentrated, rose almost 50 percent, accounting for almost half of the total increase in expenditures in the economy. Government purchases of goods and services--Federal, State and local--increased some 7 percent.

In the most recent quarter, the decline associated with the steel dispute has been largely reflected in the private investment sector. Government outlays and consumer expenditures have continued to rise.

Table 2.- Personal Consumption Expenditures

	2nd quarter 1958		2nd quarter 1959		3rd quarter 1959		Change 2nd 1958:2nd 1959 to : to 2nd 1959:3rd 1959	
	Bil. Dol.		Bil. Dol.		Bil. Dol.		Bil. Dol.	
Personal consumption expenditures	<u>290.9</u>		<u>311.2</u>		<u>313.3</u>		<u>+20.3.</u>	<u>+ 2.1</u>
Durable goods	36.7		44.1		43.6		+ 7.4	- 0.5
Nondurable goods	141.5		147.7		148.0		+ 6.2	+ 0.3
Services	112.7		119.4		121.6		+ 6.7	+ 2.2
Consumer disposable income	312.9		335.3		335.1		+22.4	- 0.2
Savings	22.0		24.1		21.9		+ 2.1	- 2.2
Personal savings rate	7.0%		7.2%		6.5%		+ 0.2%	- 0.7%

(Seasonally adjusted annual rates)

Source:

U. S. Department of Commerce

The consumer sector shows broad strength, particularly for durable goods for which expenditures rose 20 percent between the second quarter of 1958 and the second quarter of 1959. Sales of appliances and furniture were up, reflecting a higher rate of new housing completions. Sales of new automobiles have risen to a rate of over 6 million cars this year (including some 600,000 foreign cars). This compares with about 4 1/2 million in 1958 but is still less than in 1955 when over 7 million cars were purchased. Consumer spending for services has about kept pace with the rise in consumer income, although expenditures for non-durables, especially food, did not rise as fast. This reflects the lower level of food prices this year.

By and large, the increase in total consumer expenditures by the second quarter of this year was about in line with the rise in consumer incomes, after taxes. The rise in consumer takings has also involved a sharp expansion in consumer credit outstanding, not only for the purchase of automobiles but for other purposes as well. Even so, with higher incomes, the ratio of repayments on installment credit to income has not changed materially for some years. Moreover, while the ratio of total consumer credit outstanding to income is somewhat higher than a year ago, it still is not as high as two years ago.

In the most recent quarter, consumer expenditures, most notably for services, have continued to increase although consumer incomes showed little change overall. Accordingly, there was some reduction in the rate of personal savings out of current income.

Table 3.- Private Investment Expenditures

	2nd		2nd		3rd		Change	
	quarter		quarter		quarter		2nd 1958:2nd 1959	
	1958		1959		1959		to : to	
	Bil.	Dol.	Bil.	Dol.	Bil.	Dol.	2nd 1959:3rd 1959	
							Bil.	Dol.
Private investment	<u>52.5</u>		<u>75.7</u>		<u>66.9</u>		<u>+23.2</u>	<u>- 8.8</u>
Residential construction	16.9		23.1		22.6		+ 6.2	- 0.5
Non-residential construction	17.7		17.9		18.3		+ 0.2	+ 0.4
Producers' durable equipment	22.6		26.0		27.0		+ 3.4	+ 1.0
Change in business inventories	- 5.8		10.4		- 1.0		+16.2	-11.4
Net exports of goods and services	1.2		- 1.8		0.0		- 3.0	+ 1.8

(Seasonally adjusted annual rates)

Source:

U. S. Department of Commerce

Most of the increase in private investment outlays up to mid-1959 and the subsequent decline stem from sharp shifts in the business inventory situation. In the second quarter of 1958, business inventories were being reduced at a rate of almost 6 billion dollars a year. By the second quarter of 1959, business inventories were being accumulated at a rate of over 10 billions a year though part of the increase was due to the prospects for a steel strike. Even so, with business sales up appreciably in 1959, stock-sales ratios, particularly in durable goods industries, at the end of June were substantially below a year earlier and low in comparison with other recent years. There was a substantial gain also in outlays for residential construction, between the second quarter of 1958 and the second quarter this year, involving large federal purchases of mortgages and more liberal credit terms for FHA and VA assisted housing. The rate of new housing starts rose from an annual rate of about 1.0 million units to almost 1.4 million. More recently, housing starts have eased off as credit conditions have tightened. The September rate of starts, however, was still above a year earlier.

Business capital outlays for new equipment, which had declined sharply in the 1957-58 recession, rose 15 percent by mid-1959 and a further gain was noted in the third quarter. However, such outlays have not risen as fast as in the recovery of 1954-55, and are still substantially below the level reached two years ago. Business construction, however, has not changed much in total. Construction of industrial plants is down, reflecting enlarged capacities from earlier programs, while commercial construction, particularly of office buildings has improved. Purchases of farm machinery were apparently increased earlier this year, partly reflecting the higher farm income realized in 1958. Farm construction also appears to be at a higher level than in 1958.

Our net export balance was a minus factor in the economy up to about mid-year but more recently has shown some improvement. U. S. imports, earlier this year ran more than 20 percent ahead of a year earlier and have continued at this level in recent months. Exports were somewhat under a year earlier but more recently have risen above. The rapid rise in foreign gold and dollar holdings earlier this year has slowed with the recent improvement in the trade balance and the repayment before maturity of some foreign loans.

Table 4.- Government Purchases of Goods and Services

	2nd quarter 1958	2nd quarter 1959	3rd quarter 1959	Change	
				2nd 1958:2nd 1959 to : to	2nd 1959:3rd 1959 to : to
	Bil. Dol.	Bil. Dol.	Bil. Dol.	Bil. Dol.	Bil. Dol.
Government purchases of goods and services	<u>91.1</u>	<u>97.7</u>	<u>98.4</u>	<u>+ 6.6</u>	<u>+ 0.7</u>
Federal	51.3	53.9	53.6	+ 2.6	- 0.3
National Defense	(44.3)	(46.2)	(45.9)	(+ 1.9)	(- 0.3)
State and local	39.7	43.8	44.8	+ 4.1	+ 1.0

(Seasonally adjusted annual rates)

Source:
U. S. Department of Commerce

In the government sector, federal purchases of goods and services at mid-year were somewhat larger than in mid-1958, primarily due to higher outlays for the national defense. In the third quarter of 1959, federal purchases showed a small decline from the second quarter, again due to a reduction in national defense expenditures. Transfer payments, such as unemployment compensation, are running under a year earlier as a result of an improved employment situation. Expenditures by State and local governments rose somewhat more over the past year than in most recent years, although there has been a recent downtrend in public construction. Nevertheless, State and local government payrolls continue to move up as employment and wage rates increase.

We turn now to the outlook for these major expenditure flows in the period ahead, specifically for the next 12-15 months. Budget expenditures of the Federal government in the current fiscal year, according to the September Budget Review, are scheduled to be below the fiscal year which ended June 30, 1959. Federal receipts on the other hand have risen sharply reflecting increased tax receipts generated by economic recovery. A small budget surplus was projected for the current fiscal year in contrast to a substantial deficit incurred in 1958-59. State and local government expenditures, on the other hand, are expected to continue their rise, although the large increase of the past year may not be matched, partly as a result of high interest rates as well as some slackening in the highway and school construction programs. Thus, total government expenditures in the year ahead are likely to rise much less than in the year just passed.

Similarly, we should not expect as large an increase in private investment expenditures, as in the past year when there was a radical shift in the inventory situation, as well as a rapid increase in residential construction. Nevertheless, with steel operations resumed, a substantial rate of inventory accumulation is likely for many months ahead, not only to rebuild stocks of steel but also to bring stocks generally better in line with the level of sales, present and prospective. However, the expansionary impact of inventory build-up will likely be felt more in the first half of 1960 than in the second half of that year.

There also appears to be every likelihood that business capital outlays for new plant and equipment will continue to increase in 1960. According to the September survey by the Securities and Exchange Commission and the Department of Commerce, business planned to spend 18 percent more for new plant and equipment in the fourth quarter of 1959 than in the final quarter of 1958. Each succeeding survey during the year has indicated upward revision of plans reported earlier. Corporate profits have been reestablished at a high level and rising sales have generated business optimism. Further, we should keep in mind the investment generating effects of heavy expenditures for research and development by business which has risen to a rate of some 9 billion dollars a year. The tight steel supply, may, however, cause some postponements. Thus far, most of the increase in capital outlays is for new equipment rather than for enlarging plant, but as output comes closer to capacity industrial construction may increase as well. The prospects are not bright for farm capital outlays, inasmuch as farm income has moved lower. Residential construction, which is fairly sensitive to high interest rates and a tightening in the availability of mortgage financing, will likely continue to ease off in 1960. Also, construction costs have increased.

Our transactions with foreign countries over the next year should provide a plus factor for the economy in contrast to the past year. Foreign holdings of gold and dollar reserves have improved sharply, some trade restrictions have been eased, and economic growth abroad has been resumed. Although U. S. imports are likely to continue to rise, exports may well increase more than imports in the year ahead.

The consumer is likely to increase his expenditures. Higher outlays by the business and government sectors will reinforce rising consumer demands. Although the economy may not grow as fast in the next 12 months as in the past period, the rate of growth will likely exceed the long-term rate of 3 percent or so a year. Employment should increase faster than additions to the labor force and unemployment may well be reduced further especially as the rate of productivity advance per man hour usually slows at this stage of the business cycle. Wage rates continue to move up steadily. In manufacturing, straight time hourly earnings have risen $3 \frac{3}{4}$ percent over the past year. Next year, higher consumer incomes are likely to translate into higher purchasing power again for the average consumer. The average price rise is likely to be small since somewhat lower food prices will tend to offset increases elsewhere. Public reception of new car models has been generally good so far, and we may expect a further increase in automobile sales and in durable goods overall next year. This will likely involve again some increase in consumer credit outstanding. Expenditures for services should rise about in line with the gain in income. Expenditures for nondurables, including food, may not rise as much as income in 1960. But a favorable aspect for the longer run is that the heavy-eating teen age group will be increasing faster in the next 5 years than any other age group.

One final note from business cycle annals. According to the National Bureau of Economic Research, the expansion phases of the post-war business cycles have run some 3 years or more. Thus, if the current expansion phase should conform, the next critical period would not be until the spring of 1961. In view of the interruption to economic growth occasioned by the steel strike, it might well be put off further.

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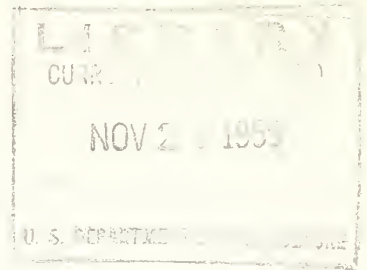
THE NATIONAL AGRICULTURAL OUTLOOK CONFERENCE
United States Department of Agriculture

Statement by

Gerhard Colm

National Planning Association

November 16, 1959



The rapid recovery from the recent low of the 2d Quarter 1958 was interrupted by the steel strike in the 3d Quarter 1959. From the 2d Quarter 1958 to the same period 1959 total production was increased by 10 percent in constant prices. However, even without the steel strike some slow-down in the expansion was to be expected because the increase in inventories of the first half of this year was likely to decline and the dynamic forces of recovery were bound to be reduced.

Assuming no further interruption of steel production total production, income and employment are likely to rise further in 1960 from the levels attained in 1959. The recent McGraw-Hill surveys show an increase in intended business outlays of \$3.4 billion (10 percent) for 1960; the Michigan Survey Center's study of consumer attitudes indicates that consumers are in a buying mood. They are attracted by the new model cars, although a considerable portion of the sales of these compact cars will be at the expense of sales of the older type cars. State and local government outlays are likely to continue to rise; exports may be a bit up due to excellent economic conditions in some of the overseas countries. When steel becomes available the depleted inventories of steel and steel products will be rebuilt. On the negative side is the likelihood of a cut in residential construction and the drop in farm incomes.

All this adds up, considering the secondary effects of additional outlays, to a rise in GNP which in terms of present prices should bring us close to the \$500 billion mark for the year 1960 as a whole.

However, the slowdown in recovery which was expected for the fall of 1959 is likely to materialize when the post steel strike inventory build-up has been completed. There is a real question as to whether the forces of economic expansion, which are indicated by present surveys of consumers, business and government intentions, will be adequate to absorb the expected large increase in the labor force and the continuing rise in productivity. It is possible that business may revise upwards its present plans for investment outlays. It is also possible that the Federal Government will increase expenditures beyond those now contemplated. Judged only by the evidence of present plans the conclusion is suggested that economic expansion will continue through 1960 but at a rate not sufficient to approximate full employment. This means that some degree of unemployment will remain a problem.

With the outlook for a rather moderate rate of expansion there seems to be little likelihood of a general inflationary pressure on prices resulting from excessive demand. There is a likelihood of a mild but continued upward push particularly on manufactured prices originating from the cost side of production.

The outlook for an inadequate rate of growth is less a problem of a cyclical than a structural nature. There are factors in the American economy which exercise a dampening effect on economic growth. There is a problem of a restrictive fiscal and monetary policy which is designed to combat inflation but is actually more effective in keeping a check on investment, particularly housing, and incomes. There is a balance of payment problem which is largely the result of the fact that American industry faces competition with the industries of other countries which in the first postwar decade were primarily concerned with their own reconstruction. These are examples of problems which must be solved in order to attain, over a period of time, the rate of growth needed to meet the rising domestic and international requirements of the American economy.

UNITED STATES DEPARTMENT OF AGRICULTURE
Agricultural Research Service
Institute of Home Economics

NEW DEVELOPMENTS IN CONSUMER CREDIT

By Lelia Easson
U. S. Department of Commerce

Impressive new developments in consumer credit concern revolving credit plans and the proliferation of credit card systems. Also of interest are the grand totals of amounts owed, both in absolute amounts and as a percent of disposable personal income.

The total amount of credit usually spoken of as consumer credit ^{1/} amounted to \$48.4 billion on October 1, 1959, or an average of \$900 per household. These figures compare with approximately \$17 billion outstanding 10 years ago or an average of roughly \$400 per household (Regulation W was in effect to June 30, 1949), and with \$7 billion in 1939 or an average of roughly \$206.

The rise in these averages, however, is not as meaningful as it appears at first glance, because \$206 in 1939 would have purchased roughly as much goods and services as \$433 in 1959. This means that U. S. households today have consumer debt for a little more than twice the quantity of goods and services, including automobiles, than in 1939, rather than four and one-half times the quantity as the figures unadjusted for rise in consumer prices would indicate. These calculations are intended to draw attention to a fact, and are not a precise measurement. Ability to pay is also much higher. While median family income figures are not available for 1939, half the families had more than \$3,107

^{1/} The concept of consumer credit used in this article is that used by the Board of Governors of the Federal Reserve System in its statistical series: Credit used to finance the purchase of commodities and services for personal consumption or to refinance debts originally incurred for such purposes. No minimum period for repayment is specified but credit included is of short or intermediate term. Excluded is credit to Government agencies, nonprofit or charitable organizations, farmers, and business firms, as well as real estate mortgage credit.

in 1949 and half had more than \$5,087 in 1958, a rise of 64 percent. Consumer credit outstandings rose more, however, even in terms of goods and services for which the credit was used, that is, adjusted for price change.

As a percent of total disposable personal income, consumer credit has shown considerable growth. While this type of consumer debt at year-end amounted to more than 10 percent of disposable personal income in 1939, the proportion had contracted to 9.1 percent in 1949 but may rise to 15 percent by yearend 1959. Since consumer credit volume tends to peak in December, a lower relationship would usually be shown by using midyear credit outstandings.

Though these general indicators of consumer debt imply a considerable burden on families for repayment, additional facts temper this impression. Nearly 15 percent of the amount owed on September 1 was for charge accounts and service credit, often thought of as "convenience credit." Moreover, if present relationships between repayment and outstandings continue, the average installment credit dollar now owed at furniture stores will be paid off in 8 months or so, at department stores in 6 to 7 months, and for autos, 11 months. The early 1959 survey of consumer finances for the Federal Reserve Board showed that 40 percent of spending units had no "personal" debt at all at that time.

These measures are not only the major indicators of use of consumer credit but they serve to underline the importance to families of keeping abreast of the news in the consumer credit field to improve their credit buymanship. More than one authority has pointed out that credit users appear more concerned with the size of the periodic payment than they are with interest rates, service charges, and other costs; convenience is also generally conceded as a strong determinant in choice of credit sources.

For a good many years, the offerings of credit from the various sources have remained about the same in their diversity and character--charge accounts, cash loans and installment purchase credit with modifications. Major variations in the credit picture have tended to focus around terms and the tempo of promotion of credit use, motivated by business acumen and caution.

A few years ago, however, a concept of credit extension that had been little used in the consumer credit field began to "catch on" among retail credit-granting stores and more recently it has been adopted by some banks. This is the concept of revolving credit.

Perhaps revolving credit is best understood by thinking of the parallel in business finance--the situation in which the business man applies to the bank for a line of credit on which he may draw from time to time up to a limit specified by the bank as the money is needed, paying interest on the money in use as well as other charges, and making payments on principal according to terms of the agreement.

Persons can now obtain similar credit accommodations for consumption purposes. Arrangements are made in much the same way with stores and banks that offer these plans--the individual fills out an application form, the lender appraises him as a credit risk, perhaps with the aid of a credit bureau or other outside checks, and if the individual is accepted for the credit plan, the maximum amount he may owe at any one time is specified, together with the amount he is obligated to pay each month which may be either a flat amount related to the credit ceiling or a percentage of the balance. A charge is made for the service extended. All bank and store plans are similar in that they have these features in common. Other aspects of the plans differ not only as between stores and banks but also from store to store and bank to bank.

Revolving Credit in Retail Stores

A retail store first introduced the revolving credit plan in 1938 but for many years there was no general adoption of the plan. However, since the mid-50's its use has become rather general. In some stores it is called a continuous budget account or a permanent budget account. A typical plan usually referred to as a "rigid limit" plan, is described below, as is a variation called a "flexible chart" plan and another development spoken of variously as the all-purpose credit plan, the one-account option plan, or the charge account with option terms.

As stated above, a line of credit with a predetermined limit is extended to the customer; the limit is related to the store's appraisal of the customer's ability to pay. Stores vary in the time cycle they choose for payment of the ceiling amount. For example, under the rigid limit plan, if the ceiling for a particular individual were set at \$180, the store's policy might call for, say, \$15, \$18, or \$30 monthly payments, depending on whether the time cycle were 12, 10, or 6 months. In other words, while the ceiling would vary for different customers under the plan, the time cycle for accounts to revolve completely would be the same for all revolving accounts with a particular store.

On the other hand, under the "flexible chart" plan payments would not be a prearranged, fixed amount associated with the ceiling, but would be a specified percentage of the balance outstanding with a minimum remittance of \$10 unless the amount owed is lower.

Most stores with revolving credit systems make the credit service available for all types of merchandise sold in the store or from catalogs. It is estimated by the Credit Management Division of the National Retail Merchants Association that 88 percent of department stores offer revolving credit and a survey shows that most of these stores make a service charge of 1-1/2 percent per month on unpaid balances. Additional purchases may be added to balances up to the limit without special authorization. Some stores employ charge plates; others do not. Revolving credit does not replace open charge accounts in most stores but supplements it; charge sales continue to constitute by far the largest proportion of credit business.

The variant of revolving credit called the all-purpose credit plan (or the one account option plan or the charge account with option terms) combines the advantages of the charge account and delayed payment plans. The main features of the typical all-purpose plan are: (1) no charge for 30 days after the billing date; (2) carrying charge thereafter, probably 1-1/2 percent on the net brought forward balance each month; (3) flexible limit as long as the account is in current status; (4) on balances under \$50, monthly payments of \$10 and on balances over \$50 a minimum of 1/4 of the amount owed but 1/3 or 1/2 are recommended. In some stores where this plan is instituted, old customers may retain their charge accounts and only new ones are required to go under the plan; in other stores, both charge account and older-type revolving credit customers are placed under the charge account with option terms plan if it is adopted.

The store's viewpoint on revolving credit

From the standpoint of the stores, there are several reasons for installing revolving credit plans, but, on the other hand, plans also have drawbacks and a store must come to a decision as to the course that will maximize profits. Some of the considerations are as follows.

Customer inconvenience is avoided by plans providing advance clearance of credit sales, small or large. Extra gross income is derived from the delayed payments on what was formerly open-account credit, and the typical 1-1/2 per month percent carrying charge is higher than the average store installment account credit charge which is more likely to run 12-13 percent per annum.

On the other hand, costs under revolving credit plans are relatively high. Store spokesmen cite the need for added precaution in authorizing revolving credit sales, closer collection followup, paper work in handling the volume of small sales checks, higher bad-debt loss than on 30-day accounts, and greater tieup of capital in relation to sales. A study now under way at the National Retail Merchants Association shows that while revolving credit represents 21 percent of dollar volume of credit sales and ties up nearly 35 percent of receivables, charge accounts representing 70 percent of credit sales tie up only 39 percent of receivables because accounts are paid off in a shorter time. Whether these receivables are held, sold, or borrowed on, they represent a cost based on the value of money.

In deciding to adopt the all-purpose credit plan where the plan is to include former charge customers, as is usually the case, a store must consider the effect on sales to valuable charge customers and the effect on its competitive position in attracting desirable business. It is well known that sales to straight charge customers are very important, both in total volume and in sales per customer.

The consumer viewpoint on revolving credit

It has long been a consumer complaint that the cash customer in department and variety stores is disadvantaged because she pays the same price as the charge customer who pays, on the average, nearly 60 days later. Revolving credit, both typical and all-purpose plans, work in the direction of relieving the cash customer of sharing the costs incurred by the credit customer. Some stores make a charge on delinquent open accounts and this has the same effect as the all-purpose account so far as fairness to the cash customer is concerned. Although under the all-purpose plan there is no charge if payment is made within 30 days of billing, a charge is made for balances carried over.

Secondly, credit users are concerned with the relative size of carrying charges, and charges are usually higher for revolving credit including all-purpose plans, than for the traditional installment contract. One factor in this difference is that small purchases, both durable and nondurable, may be charged to a revolving credit account, whereas the installment contract typically has covered major purchases, though add-ons are usually possible.

Two Bank Credit Plans

Another source of credit which individuals have tapped increasingly for consumption purposes is the commercial bank. Many banks have developed their consumer credit business as a new source of profit and to bring in new customers for their other services. In addition to their usual business in direct secured and unsecured loans to individuals, made at rates that are competitive with other sources and that vary with the security, a limited number of banks now offer revolving check credit and central charge plans.

Revolving check credit

Revolving check credit is fundamentally a new approach to the extension of direct unsecured installment credit. The technique requires the instrumentality of a bank because it involves the use of checks.

Under the check credit plan a line of credit is established with a bank offering the plan, by application and the usual clearances. Under most plans the individual is furnished with a special checkbook and the mere writing of the special check creates the loan, which then is repayable according to terms specified. In other cases he uses his ordinary checking account and notifies the bank that he is borrowing under the credit plan. The plan involves no special arrangements with stores as the checks are usable anywhere. Trivial borrowings are usually not encouraged, and a minimum is sometimes stipulated.

Data from a survey recently conducted by the American Banker (covering banks voluntarily cooperating) show average lines of revolving credit at 50 banks as ranging from \$300 to more than \$1,000, with \$500-\$600 as modal. This refers to ceilings. However, customers were not using the limits of their lines but perhaps only half in the aggregate. These details are from the September 29, 1959 issue. The 1959 Proceedings of the National Instalment Credit Conference of the American Bankers Association are also illuminating.

Top lines of credit, which are reported as high as \$6,000, are dependent on bank policy and experience and statutes as well as quality of credit risk. Actual checks written tend to be rather small--sums over \$100 probably being in a distinct minority.

The pioneer user of this plan was the First National Bank of Boston. Under their "First-Check-Credit Plan" the credit user is required to make monthly payments of one-twelfth of his total approved line of credit regardless of the fact that he may have used only a portion of his line. He pays a charge of one percent a month on average daily outstanding balances (this charge includes life insurance cost) and a fee of 25 cents per check. Last March, the bank had approved lines as small as \$120 and as large as \$6,000. The average line was \$460, and the average balance of the 96 percent of accounts in use was approximately \$325.

In the Philadelphia Federal Reserve District where hundreds of banks now offer revolving check credit, 14 plans reported on by Federal Reserve Bank of Philadelphia's Business Review (September 1959) showed the following as modal: Monthly repayment terms, 1/20 of approved line; monthly rate 1 percent, with life insurance included; maximum line \$3,500; minimum size of check, none. The average line of 10 banks was \$825, a little over half of which was in use. Not all applicants had qualified, as at ten banks over a third were rejected.

Charge account banking

A not-so-new type of credit service is charge account banking. Approximately 110 banks in the United States operate this type of service. While it was first initiated in 1950, it did not "catch on" until the fall of 1958 when the Bank of America and the Chase Manhattan Bank of New York entered into full-scale charge account banking operations.

For the borrower this plan accomplishes a number of things. Charge account banking plans permit the consumer to buy on credit at a large number of stores (all plan members) but he establishes his credit at only one institution--the bank. Also, the borrower needs to carry less cash. The amounts the credit user owes to all the stores belonging to the plan are payable with one check.

In operation charge account banking is similar to the more familiar Central Charge Systems which are frequently a mutual undertaking of member stores.

A little detail about the plan of a large bank will furnish realism. Chase Manhattan's plan, known as CMCP, covers over 5,000 retailer members, some with multiple outlets. The bank issues small directories of member stores, indexed for convenience of credit card holders--persons they have approved for credit up to a certain limit. A merchant honors the credit card for purchases up to \$25 automatically, periodically takes his tally sheets of sales and credits to the bank (or a branch) and receives credit. He pays the bank a service charge of 6 percent on all charge sales in addition to a \$25 entrance fee on each store location, and other small charges. He may receive a refund on the 6 percent for high volume and high average sale amount. Stores with their own credit departments in satisfactory operation are probably less likely to become members than others.

The consumer user pays no charge if he pays his bill within 10 days of receipt. He may make arrangements to pay 20 percent each month, in which case he is charged 1 percent a month on balances outstanding. This arrangement is typical of the so-called "all-purpose account" or the "charge account with option terms" offered by some stores, and is similar to the store plan under which a carrying charge is made on delinquent charge accounts.

Credit Card Systems

Credit card systems are for charge account credit, usually 30-day accounts. In typical credit card systems, the issuer of the cards authorizes the extension of credit to an individual, reimburses the member firms or branches that sell the services or goods the cardholder buys, bills the cardholder monthly, makes collections, and takes the risk of payment. Under some systems, the credit card issuer charges fees to either the member firms or credit cardholders (annual membership dues), or both. The following analysis of systems and examples will provide further understanding.

A single firm with many outlets may authorize credit extension to its customers at any of its outlets, furnishing an authorization-identification card. Applications originate through the outlets or branches.

For example, oil company credit cards have been in use in the United States for 30 years or more. Some systems cover tires, batteries, and other auto accessories, as well as gas and oil. The retail outlet grants credit on the basis of the card, bills the credit-card-issuing firm, and is reimbursed. Losses are stood by the issuing firm, unless the retailer has failed to heed notices identifying delinquent creditors. Typically neither the retail outlet nor the credit cardholder is charged fees or dues.

United States railroads joined together to form the Rail Travel Credit Agency whose card covers rail fares, meals in diners and all-expense tours. Cardholders pay no fee. Rent-a-car firms (usually a chain) also offer credit cards.

Over 100 airlines jointly sponsor Universal Air Travel credit cards, with monthly billing. (These are in addition to another type of credit which is essentially installment credit arranged for a customer with a bank or finance company.) The cards cover air travel only but include service by other airlines. There is no membership fee but subscribers are required to pay a deposit of \$425. Cardholders may phone in reservations and receive tickets by mail.

The Bell Telephone System issues Toll credit cards. Holders may make a call "from anywhere to anywhere else" and the charge is automatically billed to the home or business phone as the case may be. Cards are obtained from the local telephone business office. There is no membership fee.

A quite different plan is one in which an outside firm organizes a group of firms selling services or goods, into a credit card system with broad geographical coverage. These are sometimes spoken of as multi-service plans.

For example, the Diners' Club is a system of this sort. It has expanded greatly by acquisition of other systems, particularly the Esquire Club and the Sheraton Hotels plan. The Diners' Club finances consumer expenditures for restaurant meals, hotel rooms, air travel, and articles purchased. All businesses participating in this plan are designated and they pay the Diners' Club a percentage on credit card purchases. User members are charged a small annual membership fee.

The American Express Company has diversified its business to sell not only travelers' checks but to provide charge credit by means of a credit card. They absorbed the Universal Travelcard System, and the Gourmet Guest Club which earlier had absorbed the Duncan Hines credit card business.

These two giants in the field--Diners' Club and American Express Company--have a strong competitor in a card system organized by a hotel chain (Hilton), i.e. it is a system set up by a business with services to sell, as in the case of oil company, telephone, and airlines credit cards, but coverage of miscellaneous goods and services is broad, as in the case of American Express and the Diners' Club. This card is known as the Hilton Carte Blanche.

Still another type of firm promoting credit cards is the Seaboard Finance Company, one of the largest small loan companies, whose cardholders may charge at member stores over the United States and Canada. Sales slips are discounted and consumer users are charged a credit usage fee only if their bills are not paid in 25 days. The fee varies with State laws governing credit, particularly small loans. Thus the cost to consumer users would probably tend to be higher than under other charge systems but this relationship would vary greatly.

A year ago 15 million credit cards of the above types were estimated to be outstanding. No doubt the number is larger today unless consolidations have offset the number of new users.

The growth of credit card systems and revolving credit at banks and stores presage a new era in credit usage, with meaning to individuals in terms of convenience, mobility, experience, levels of living, and assets, as well as in terms of expense and debt.

Outlook for Clothing and Textiles in 1960
by
Harry Kahan, U. S. Department of Labor
Before The
Agricultural Outlook Conference
Washington, D. C. November 1959

Again the time has come when the textile and apparel industry, as evidenced by expanding production and sales, is doing business in a sustained strong and rising market. Judged by advancing prices, the industry has not experienced such prosperity since the post-Korean period. Average prices for textiles have climbed 4 percent during the first 9 months of this year. Before we are too impressed by the extent and rapidity of this price rise, we should remember that last year's average wholesale textile prices were the lowest since the Korean conflict. Actually, average textile prices have now merely returned to their approximate 1956 levels. However, I feel secure in the statement that even informed members of industry may be surprised that the strong recovery from the recession of 1958 was accomplished in so short a time. Yet in the midst of this new spirit of optimism there is a feeling of uneasiness about overproduction, which is the road back to falling prices.

What is overproduction in the textile industry can be termed an overstocked position in the clothing industry. Both lead to an unhealthy inventory position. Since clothing is the major consumer of textiles, it is natural that the fortunes of each are interrelated by their common problems of production, prices, and sales. The first crucial test as to expectations in 1960 is the retail sales picture this fall.

These introductory remarks on the outlook for clothing and textiles for 1960 are not intended to bias our observations but to point out the risks involved when those in the textiles and clothing business attempt to obtain the maximum benefits of an expanding and rising market. Time and time again this has generated excessive inventories and depressed prices.

Of course there are factors other than supply and demand that have restrained an upward price movement. For example, since 1953 prices of raw cotton have fluctuated relatively close to their 1947-49 averages. (Cotton's share of fibers used in apparel is currently about 60 percent.) Also, increases in hourly average earnings in textiles and apparel have been considerably less than in most manufacturing industries.

To detail this overall picture, I will first review the price movements of textiles and apparel, then discuss the current situation in terms of long-term trends, and conclude with an assessment of what may be expected during 1960.

Textiles

A review of the recent price movements of textiles and apparel takes on added significance when related to the price movements of earlier periods. We shall begin by relating the wholesale prices of cotton textiles to mill margins. Mill margin is a measurement of the spread between the price of a pound of cotton and the price of its approximate cloth equivalent. Between August 1958 and July 1959, or the 1958 cotton crop year, mill margin advanced almost $6\frac{1}{2}$ cents, or about 29 percent. By August 1959 mill margins were the highest since August 1954. The strength of the market became all the more apparent as textile prices continued to rise during July and August of this year even though raw cotton prices declined more than 2 cents per pound. (This decline in raw cotton prices was anticipated because of the expected increase in the United States cotton supply for the 1959-60 marketing year as well as lower Commodity Credit Corporation minimum resale prices. Department of Agriculture estimates in mid-September indicated a supply about 3.4 million bales larger than 1958-59.)

Now let us look back to a time not so long ago when prices of textiles spurted between September and October 1956 following the announcement of a general 10-cent hourly wage increase that was granted to some 600,000 southern cotton and synthetic textile workers. This merely created a temporary reversal of a price decline that had begun earlier in the year. Except for seasonal rallies, prices continued to weaken throughout 1957, and by the first half of 1958 mill margins were down 26 percent from the September-October 1956 upswing. The reversal of the trend became apparent by the end of the fourth quarter of 1958 and gained momentum in the first half of 1959. Thus the industry passed through a price cycle--the old one expiring early in 1956, the new one born late in 1958.

To the trade these price cycles are reluctantly accepted as an integral part of the textile business. They are something which could be controlled by a cooperative effort of the producers, but somewhere along the line favorable prices and restraint in production drift farther and farther apart.

Over the years, with the exception of periods of world crisis, there continues to be a persistent and at times an irregular cycle of rising and falling prices for textiles with varying degrees of intensity. In this new-born 1959 prosperity, it may not be too early to look for the danger signs.

The ratio of stock of gray goods at cotton mills to unfilled orders at mid-year was the lowest since early 1956. According to trade history, changes in this ratio normally precede changes in mill activity by about 5 months. The low ratio at midyear indicates continued strong mill activity for several months in the future. If, as expected, low ratios normally last only a few months before rising (the ratio did turn up in August), a decline in mill activity is in the making. This does not infer that it will be the beginning of the end. However, it is an important factor to consider because it deals directly with inventories vs. prices. If inventories start growing

in relation to unfilled orders and this is accompanied by a rapidly growing secondhand market, i.e., converters and clothing manufacturers disposing of excess goods which normally indicates an overbought position, the outlook dims perceptibly.

As with cotton, the manmade fiber textile industry has felt the effects of the textiles recession and is enjoying the benefits of the recovery. For the 12-month period ended September 1959, the wholesale price index for manmade fiber textile products advanced 3 percent. Broadwoven goods, however, rose over 4 percent.

These price increases were accompanied by rising production and decreasing stocks, indicative of stronger mill activity to meet sustained market demand. While the manmade fiber textile industry does not have a statistic comparable to mill margin, a comparison of cotton and manmade fiber consumption figures and the shipments of broadwoven goods clearly shows that both are operating in similar business cycles.

The conclusion does not imply that the average prices of the different manmade fibers and fiber products are almost alike in price movement or that the manmade fiber segment of the textiles industry fluctuates to the same degree as the cotton segment. The timing of price fluctuations, however, corresponds closely.

One of the principal reasons why the price levels between cotton and manmade fabrics have drifted apart is that raw cotton price levels are sustained by governmental control while prices of the various manmade fibers seek their competitive level. Competition in turn has promoted improved methods of production.

Now let us shift our attention to the wool industry. The declining fortunes of wool in the last decade are now temporarily arrested by the better balance between world stocks of raw wool and demand by the apparel industry. Because of this, the price of wool tops and yarns advanced sharply this year.

The business cycle in the wool industry differs considerably from that of the cotton and manmade fiber industries. Not that wollen textiles differ in price movement in times of strong or slackening demand, but rather because the demand for wool in textile products in the last decade has been growing less and less.

The long-term decline in woolen and worsted consumption is traceable to factors which have been operating in good times as well as bad. The marked instability of raw wool prices is an additional incentive for clothing manufacturers to turn to Dacron, Dynel, and other manmade fibers as a blending agent or substitute for wool. Another contributing factor to the halving of wool consumption in the United States is the trend toward lighter weight clothing, which further drastically reduced the amount of wool used in garments. With a steady deterioration of the market, the wool industry today has less than 1,300,000 spinning spindles in place where 3 million existed about 12 years ago.

Summary

The textile industry as of the close of the third quarter of this year continues to enjoy a new-found prosperity with cotton margin reaching the highest point in 6 years. Mid-October indications show further strength.

Mills have continued to step up production in recent months although inventories of cotton goods at mill level for the first time in 12 months turned up slightly in August. Overall textile and apparel production in August 1959 as measured by the Federal Reserve Board index expanded about 25 percent in a little over a year.

The wholesale prices of textiles have now regained their 1956 levels, which, however, are much below the 1947-49 averages. The wholesale price index for textile products excluding hard fibers (1947-49=100) was 92.5 in September 1959 as compared to 88.6 in September 1958. The average for 1956 was 92.3.

Apparel

Prices of apparel at wholesale level have had relatively little upward movement in the last decade and, except for the Korean price bulge of 1950-51, have remained mostly below their 1947-49 averages. There are several important reasons why apparel prices have hovered not too far from their 1947-49 averages. The increase in average hourly earnings in the apparel industry has been only slightly higher than that of the textiles industry, the lowest of all manufacturing industries.

Also, manufacturers of apparel (about 30,000 establishments) are largely small producers and more than 95 percent employ less than 250 workers each. They are independent and highly competitive, and as such are not too restrained in producing in a deteriorating market that becomes more competitive as sales continue to decline. Inventory control is strictly each company's problem. Hence, there is hardly ever an occasion when shortages have sustained or advanced prices in the apparel industry.

The industry is usually more concerned with sales than with the problem of price increases, which because of sharp competition are spontaneously put into effect industrywide.

A comparison of 1958-59 fall clothing production figures point to the expectations of a good fall season. August to August, men's suit production is up 19 percent; overcoats and topcoats, 7 percent; sport coats, 12 percent; and trousers from 10 to 93 percent depending on style and fabric. While women's, misses', and junior apparel production figures for fall 1959 do not live up to the trade expectations of increased volume over 1958, this may be attributed to more cautious commitments by retailers for new fall merchandise with greater reliance on reorders to balance inventories.

The wholesale price index for apparel was 100.6 in September 1950, 1.3 percent above that of December 1958. Most of this gain occurred between June and September 1959 as prices of nationally advertised dress shirts advanced and higher textile prices were being translated into higher prices for work clothing and other cotton apparel. During the 2 years prior to December 1958 the index declined 0.4 percent.

The consumer price index for apparel, except footwear, has not changed appreciably since the post-Korean period although since the fall of 1955 the index has shown a tendency to retain slight gains. The recession year of 1958 had a minor effect on average apparel prices. Fall 1949 prices for women's and girls' apparel were less than 1 percent above the 1947-49 averages. Men's and boys' apparel rose about 9 percent during the same period because of higher prices for coats, suits, and trousers.

Long-term Trends--Manmade Fibers

The dynamic changes in technology in the textiles and apparel industry have a relatively short history.

Although the manmade fiber industry, specifically the manufacture of rayon, in the United States started in 1910, for a number of years its product was known as artificial silk and its price movement was directly affected by silk prices. In 1922 and 1923 as silk rose to \$10.00 a pound, rayon yarn prices advanced to \$4.50 per pound. From approximately that time a new major industry was born, expanding rapidly, and by 1939 the rayon industry was employing about 80,000 persons. By then the manmade textile market represented by rayon and acetate, or cellulosics, had secured about 15 percent of the market mostly at the expense of cotton. Nylon, the early non-cellulosic, had yet to be commercially produced. 1947 marked the first billion-pound year of manmade fiber production, of which 95 percent was still rayon and acetate. Manmade fiber in 1958 shows a different production picture with rayon and acetate only slightly above its 1947 output. However, the non-cellulosics production, represented by nylon, Dacron, Orlon, etc., has grown from 5 percent to about 50 percent of the current rayon/acetate production.

A more recent newcomer in the list of new non-cellulosic textile fiber is textile fiber glass, which passed the 100-million-pound output mark in 1957 and judged by the rate of production for the first two quarters of 1959 should easily surpass the 130-million-pound mark in 1959.

Wool

In contrast, the wool industry has a sad history of industry contraction. With the advent of World War II, the tremendous demand for wool clothing for the allied forces raised per capita wool consumption in the United

States to an all-time high. The huge demand for woolen clothing, born out of shortages and demobilization sustained the peacetime per capita consumption through 1947 at levels higher than the fighting days of World War I, though not World War II. Except for the period of the Korean incident, the close of 1947 marked the beginning of the rapid deterioration of the wool industry. In 1955, the year that the titan of the industry the American Woolen Company was dissolved, the industry had already shrunk to half its size.

Production capacity continued to decline at the rate of approximately 100,000 spindles annually. Spindles in place at the close of 1958 were about 40 percent of those which existed about a decade ago.

Cotton

The cotton industry, unlike the manmade fiber or the wool industry, had neither the rapid expansion nor the rapid contraction enjoyed or suffered by its fiber competitors. As the textile giant with more than adequate productive capacity, the number of cotton system spindles consuming cotton is secondary to the number of spindle hours of operation. A 10-year comparison of broadwoven fabric production in the United States shows that cotton has consistently maintained between 77 to 80 percent of all broadwoven fabric production.

In terms of mill consumption of all fibers, the proportion of manmade fibers has obviously been increasing since the end of World War II at the expense of cotton and wool. However, United States mill consumption of cotton is still two-thirds of all fibers, and the rate of loss has decelerated principally because manmade fibers have probably accomplished most of their major penetrations into the textiles market.

Factors Responsible for These Changes

The underlying factors causing these changes in the complexion of the textiles industry are many, but there are several major reasons why such changes occurred in relatively so short a time.

The principal reason is that the biggest customer of textiles, the clothing industry, is unable to provide the market growth to absorb productive capacity. It is the old battle of the fiber becoming increasingly violent. The manmade fiber industry has created a number of virgin markets but most of its distribution has been in channels established for cotton and wool textiles. The technological progress in the field of non-cellulosics cut deeply into wool consumption as Dacron, Dynel, and others replaced the traditionally 100 percent woolen garment in whole or in part. The trend toward lighter-weight clothing and the absence of a replacement market cut further into wool consumption. Between 1947 and 1959 per capita consumption dropped from 4.8 pounds to 1.9 pounds. This trend toward lighter weights in textiles invaded the field of cotton as well.

It is difficult to measure the extent by which the clothing market is excited by the introduction of new fibers and textile finishes, but it is evident that old market is absorbing most of the new changes as merely replacement.

Between 1947 and 1958 our civilian population increased by nearly 21 percent. During this period the expenditure for clothing in dollars merely kept pace with population. Apparel prices based on the Bureau of Labor Statistics' Consumer Price Index rose 9.8 percent. In other words, in terms of 1947 prices, per capita consumption actually declined about 10 percent in a span of 11 years.

Summary--Wholesale

Those engaged in the business of textiles and apparel have a reputation of being optimistic even when things are going from bad to worse. There is always the next season. This spirit of optimism is important even though it may be based on only the favorable business indicators because buyers are better customers when surrounded by such a spirit.

The outlook for textiles for a long time to come indicates that productive capacity will continue to be adequate and the competition between manufacturers will continue to remain keen in a market that has vast competitive possibilities.

There is nothing in the foreseeable future except a voluntary restraint in production to minimize the cycle of inventory buildup and price weakness. The levels of prices over time should rise to meet the increasing costs of production. This, however, will probably be true in most manufacturing industries. Hence, the rate of profit on sales should continue to be comparatively low after averaging the good years and the poor years.

Although average wholesale prices for apparel in the past 10 years are still at their approximate 1947-49 level, prices of certain items such as women's hosiery and nylon slips are much lower while men's coats and suits are substantially above the 1947-49 level. Price changes between the years have been mostly moderate and the effects of advancing or falling textile prices are to a large part assimilated during the process of manufacture. Between 1953 and 1958 the wholesale price index for all commodities advanced 10.5 percent as average hourly earnings in all manufacturing industries rose 20.3 percent. In the apparel industry, average prices in 1958 were at the same level as 1953 although average hourly earnings increased 13.5 percent. The counterbalancing of price movements of various articles of apparel and the ability of the manufacturers to manipulate production should be considered carefully as a reason for the apparent stability of apparel prices.

Wholesale prices of footwear are currently about 32.5 percent above the 1947-49 level, having advanced 9.2 percent between 1953 and 1958 and 8.2 percent between January 1958 and September 1959. Here, unlike the apparel industry which is still at the approximate 1947-49 price level, there is an

absence of counterbalancing price movements. The rising cost of raw materials, labor, and other production expenses are more directly translated into higher prices.

Summary--Consumer Apparel Prices

Average consumer apparel prices, exclusive of footwear, have remained close to their 1947-49 level even though the period surrounding the Korean crisis created a short-lived price bulge. The price increases from one season to the next are sometimes significant but are mostly lost by the time the season draws to a close.

Yet it is noted that wool apparel prices advanced sharply (12.5 percent) between 1950 and 1951 and were chiefly responsible for an 8-percent rise in men's and boys' apparel prices. Wool apparel prices since have mostly maintained this level, and 1958 prices for men's and boys' clothing were still within 1 percent of the 1951 level.

Between 1952 and 1955 the index for cotton clothing remained slightly below its 1947-49 price level. During 1956 and 1957 it advanced about 3 percent where cotton clothing prices continue to fluctuate. The index for women's and girls' apparel was less than 1 percent above the 1947-49 level in 1952, dropped slightly below in 1953, and remained below through 1958.

The major reason for a 9.5 percent disparity in movement of prices from 1947-49 for men's and boys' apparel as compared to women's and girls' lies in the fact that prices for manmade fiber clothing (whose index was 81.4 in 1958) have been declining steadily since 1951. Manmade fiber apparel is much more important in women's clothing budgets than in men's. Typical man-made fiber items bought in large volume by women are dresses, slips, hosiery, blouses, panties, nightwear, etc.

Hence, with these counterbalancing price factors, the 1958 consumer price index for apparel, excluding footwear, is at 102.8 and still within 1 percent of its 1952 level. A long-term forecast of consumer apparel prices based on the price history of the last 10 years can only support a statement of modest increases.

Retail prices for footwear have reflected wholesale price increases. The footwear index at September 1959 was 137.9. The effect of including footwear in the apparel index raises this index by about 5 percent.

Summary

The analysis of the 1960 outlook for textiles and apparel in November 1959 must be based on the circumstances as we now see them. One of the more immediate and important conditions attached to good times in 1960 is how good retail clothing sales will be. Their effects will be felt right back to mill level. A comparison of September 1958 to September 1959 Federal

Reserve Bank sales and stock reports for selected cities and areas is somewhat disappointing.

It must be remembered that comparisons are being made to a period influenced by rather poor sales. Sales volume, even though disappointing, is higher than a year ago. While merchants are stocking for Christmas selling and improved sales for the first 9 months of 1959 would support higher inventories, I am concerned that unless the October sales picture improves considerably merchants may find that they guessed wrong on their buying.

Regardless of the outcome of the fall season, there appears little likelihood of any appreciable changes in the average prices for clothing next year.

The outlook at the wholesale level for apparel is clouded not only by the present uncertainty of retail sales but is also conditioned as to how labor will fare during 1960 both within and without the clothing industry. Insofar as the effect of textile prices on the wholesale prices of apparel is concerned, I do not feel that average apparel prices should be materially affected unless the textiles market is severely disturbed. As for textiles, maintaining present price levels should be the chief concern of the industry for 1960.

UNITED STATES DEPARTMENT OF AGRICULTURE
Agricultural Marketing Service

OUTLOOK FOR COTTON IN 1960

Talk by Frank Lowenstein
Agricultural Economics Division
at the 37th Annual Agricultural Outlook Conference
Washington, D. C., 3:45 P. M., Wednesday, November 18, 1959

The supply of cotton in the United States during the current season is estimated at about 23.7 million bales, an increase of about 3.4 million bales over that of 1958-59. Most of the increase in supply is being caused by a larger crop, up about 3.3 million bales over that of 1958. The larger crop in turn is being caused by larger acreage and a record high yield. The larger acreage was caused by the ending of the acreage reserve program, which took about 5 million acres of cotton land out of production in 1958, and the institution of the Choice B support program, which added about 1 million acres to the acreage allotments for cotton in 1959. Along with the sharp increase in acreage, another record high yield was set. Yield per harvested acre for 1959 is up about 8 pounds from the previous record high of 1958 to about 474 pounds per acre.

The high yield for 1959 continues a long-time trend for the yield per harvested acre to increase. (Figure 1.) This trend has been evident since the mid-1920's, but during the last four seasons Government programs have stimulated regional shifts in acreage so that the yields increased even more. Shifts in the regional distribution of acreage under the acreage reserve program, which was in effect for the 1956 to 1958 crops, caused an increase in the yield per harvested acre in the United States of about 6 to 15 pounds. Under the acreage reserve program relatively more acreage was taken out of production in the low-yielding regions of the Southeast and Southwest than in the high-yielding regions of the West and the Delta. Just the reverse happened under the Choice B program for the 1959 crop--relatively more acreage was added to allotments in the high-yielding than in the low-yielding regions. As a result, average yield per harvested acre for the U. S. probably was increased by about 6 pounds by this program.

The regular nationally allotted acreage for upland cotton for 1960 has been announced at the minimum allowed by law, about 16.3 million acres for the U. S. For 1960 any farmer can increase his acreage by up to 40 percent of the regular, or Choice A allotment if he chooses to accept a support price which is 15 percent of parity lower than the support price under the Choice A program. (Figure 2.) For 1961 and subsequent years the Choice B program is no longer in operation but the minimum upland acreage allotment for the U. S. remains at about 16.3 million acres under current legislation.

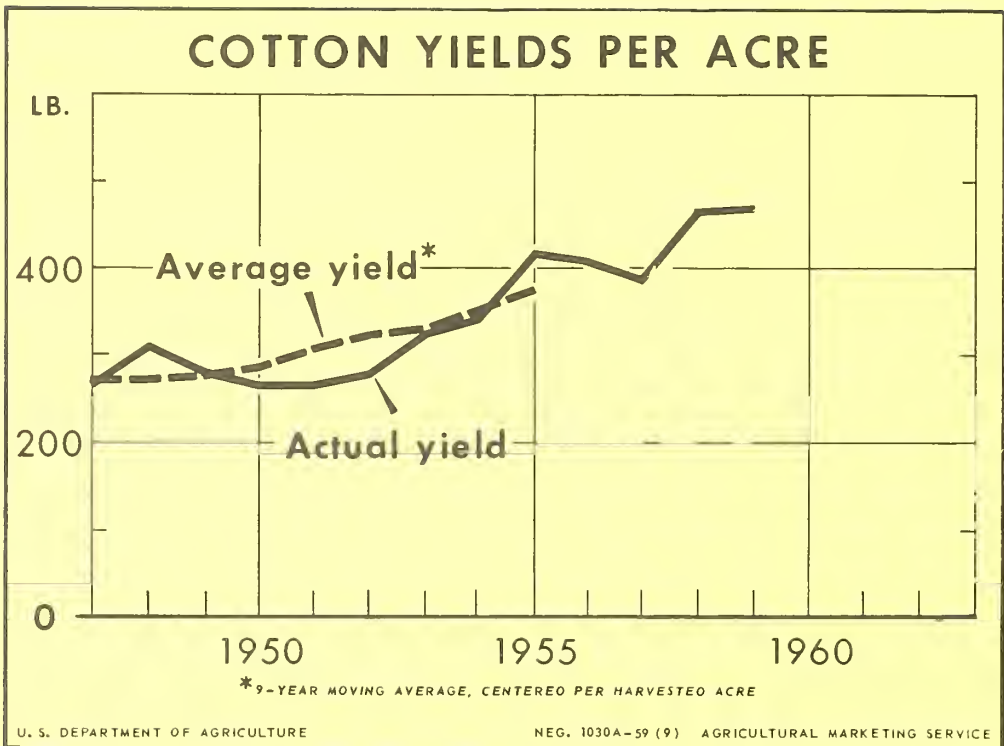


Figure 1

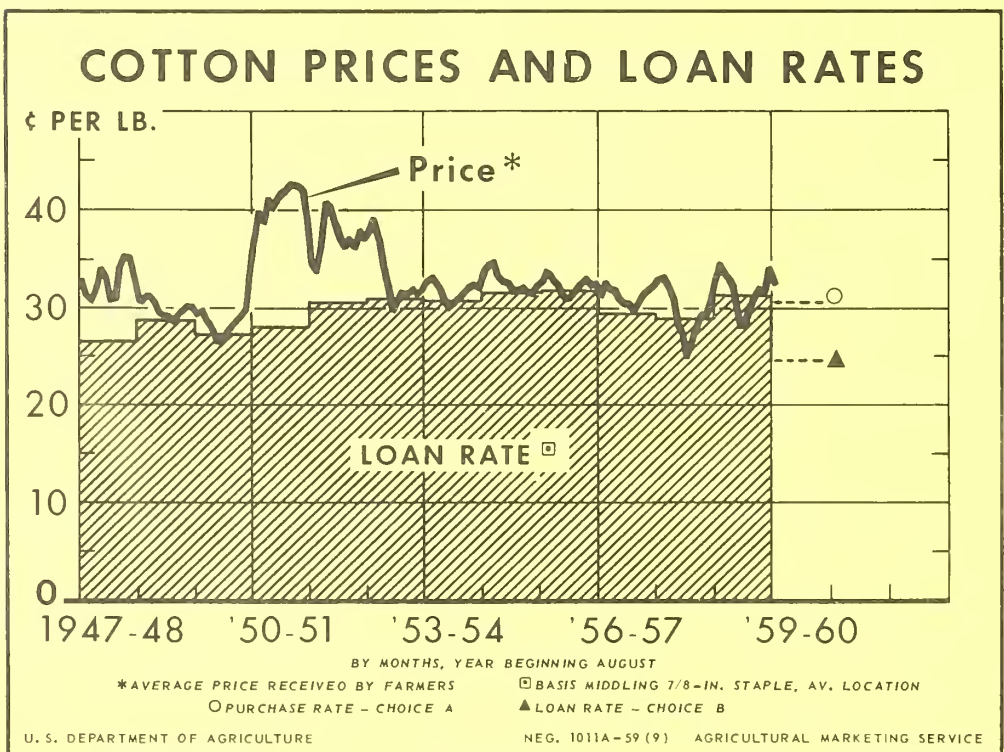


Figure 2

If yields continue at levels of the recent past, or if the upward trend in yields continues, the minimum acreage allotment specified under the law could mean crops of about 15 million bales. During the current season, disappearance is expected to come close to 15 million bales, because of a sharp increase in exports and strong domestic mill consumption. (Figure 3.) If a large disappearance does not materialize, stocks of cotton will increase above the relatively large level of 8.9 million bales in existence on August 1, 1959. Furthermore, if crops of around 15 million bales should materialize in the future, disappearance of the size estimated for the current season would have to be maintained in order to prevent accumulation of additional stocks. Disappearance expected for the current season is the largest since 1956-57.

Exports of cotton this year are expected to be about double the 2.8 million bales of last season. The increase is being caused by a decline in foreign free world cotton production, an increase in foreign free world cotton consumption, relatively low stocks of cotton in the foreign free world, stable prices for cotton at lower levels on world import markets and a more competitive export price for U. S. cotton. Historically, U. S. cotton prices have been dominant in world markets. When prices have declined the acreage planted to cotton abroad has tended to decline although factors other than price also have been important. This is what happened during the current season. Last season some countries that export large quantities of cotton foresaw a decline for prices of cotton. Consequently, acreage for cotton in 1959 in these areas declined. In other words, the acreage was not as much as it probably would have been if the prices had not declined. This illustrates what can happen in the long term abroad if U. S. prices for cotton are maintained at relatively low levels. The reverse is true when export prices for U. S. cotton are maintained at high levels, as witnessed by the increase in cotton production abroad since the start of the Korean War. Although the decline in foreign free world production during the current season is expected to be only about 2 percent of production in 1958-59, such a decline could mean an increase in U. S. exports of approximately 14 percent over last year.

Consumption of cotton in the foreign free world this year is increasing because the foreign free world is recovering from a textile recession. Lower prices for cotton tend to cause the consumption of cotton abroad to increase, principally by making it more competitive with other fibers, such as manmade fibers. As in the case of production, slight changes in foreign free world consumption usually mean large changes in U. S. exports. The increase in foreign free world consumption this season is expected to be only about 5 percent above last season, but this could mean an increase in U. S. exports during the current season of approximately 36 percent over those of 1958-59. For the current season, the changes in U. S. exports are being caused by changes in both foreign production and consumption.

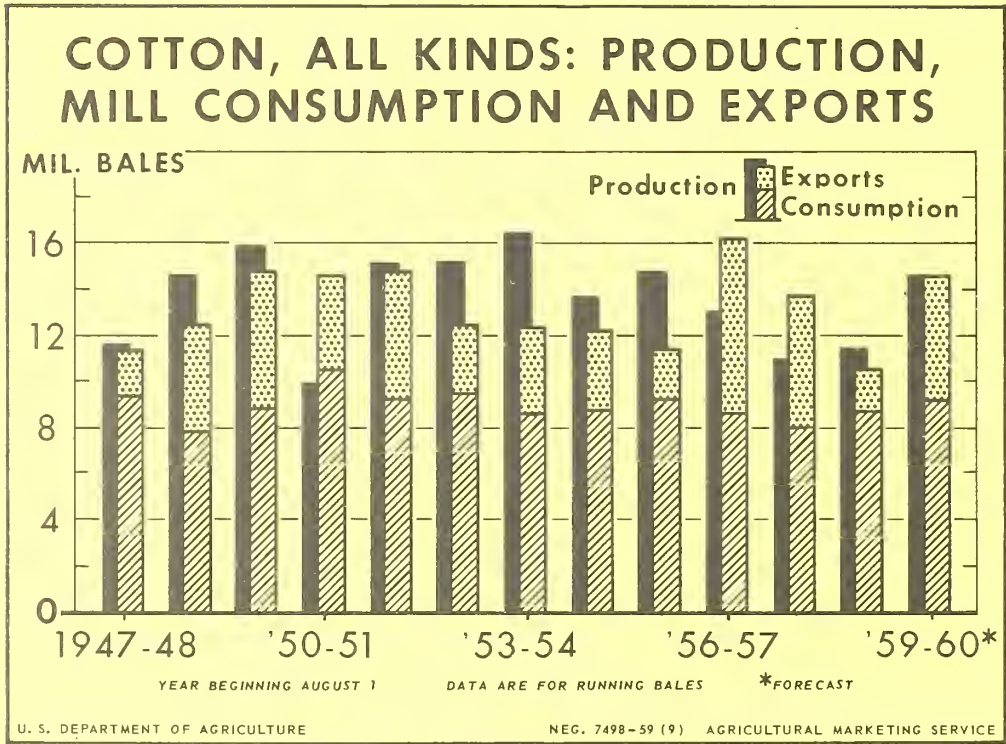


Figure 3

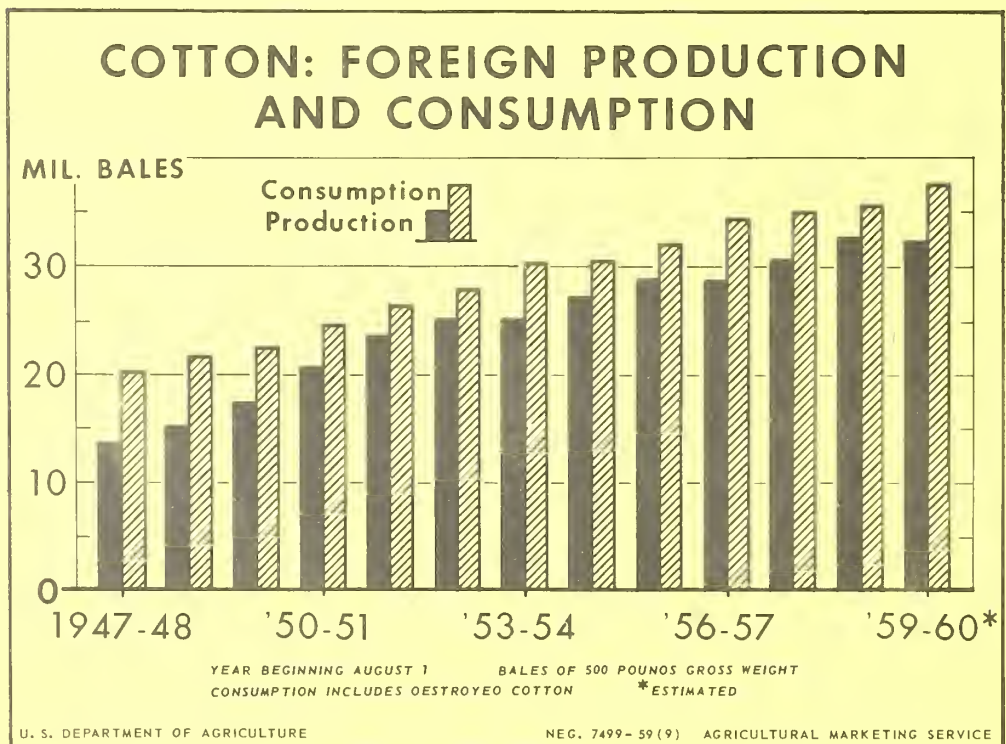


Figure 4

Stocks of cotton in the foreign free world during 1958-59 were reduced by about 1.3 million bales. As a result, stocks of cotton on August 1, 1959 were at a low level in relation to the level of consumption expected abroad. Furthermore, we know from experience that low prices tend to stimulate the accumulation of stocks as well as to cause larger consumption. It seems highly likely therefore that stocks during the current season will increase. Relatively low prices for cotton tend to increase U. S. exports in three ways: (1) By holding down expansion of cotton production abroad; (2) by stimulating the consumption of cotton abroad at the expense of manmade fibers; and (3) by stimulating the carrying of larger stocks of cotton directly because of a lower price and because the lower price also stimulates larger consumption. (Figure 4.)

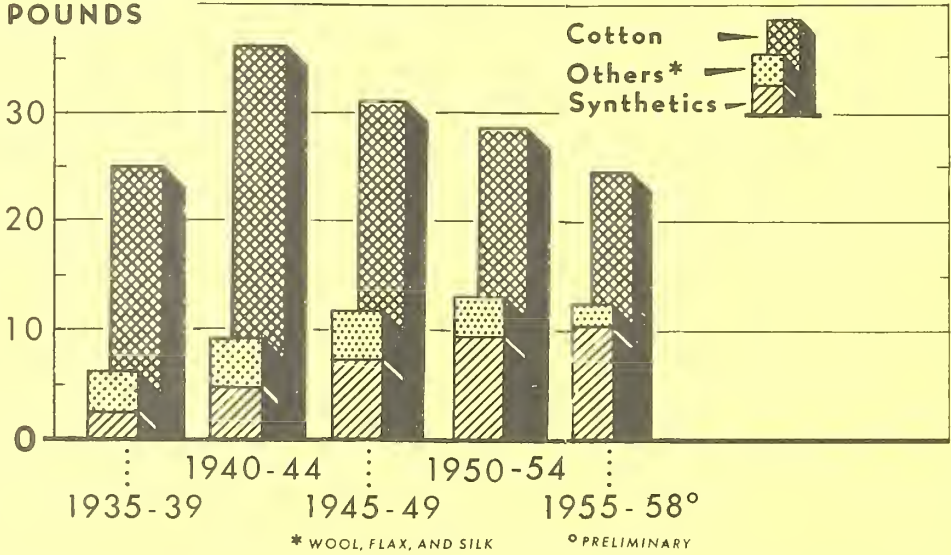
Turning to the domestic scene, consumption of cotton during the current season is expected to be about 9 million bales. This compares with 8.7 million bales a year earlier. The high level of consumption during the current season is being caused by a higher level of economic activity and replenishment of the low level of stocks of textiles. Perhaps the lower cotton price caused primarily by a shift in the support price program has also stimulated consumption. However, the effect of prices on cotton consumption is usually a long-term factor. It seems unlikely that the lower price has had a chance to affect the cotton consumption this year, but over the long run it probably will cause cotton consumption to increase. This occurs here and abroad for much the same reason--the substitution of manmade fibers for cotton, the use of which might be higher if cotton prices were higher. Cotton consumption per person during the postwar period has declined fairly steadily and one of the principal reasons for this has been the substitution of manmade fibers for cotton. (Figure 5.) The minimum price stipulated by the current price support program should help the future competitive position of cotton. But pricing policies, of course, are no substitute for research to improve the quality of the cotton fiber or for promotion to tell consumers about its good qualities. Research and promotion have been most effective in the past and most certainly will continue to play their part in the future, along with lower prices at domestic mills for cotton.

There is one other aspect of cotton which has long-term implications, and that is the stocks of cotton now in existence. At the start of the current season the total carryover of cotton was about 8.9 million bales and CCC held (owned and held as collateral against outstanding loans) about 7 million bales of this cotton. (Figure 6.) Since August 1 a large quantity of the CCC-held stocks has been sold, and on October 30 the stocks totaled only 6.0 million bales. However, the large crop of the current season indicates that there will be very little if any liquidation of the carryover at the start of this season. If we are to reduce the carryover and CCC holdings below their current level, it is but simple arithmetic that we must either have smaller crops in the future or larger disappearance than the approximately 14.5 million bales expected this season.

Natural and Synthetic Fibers

FIBER CONSUMPTION PER PERSON

POUNDS



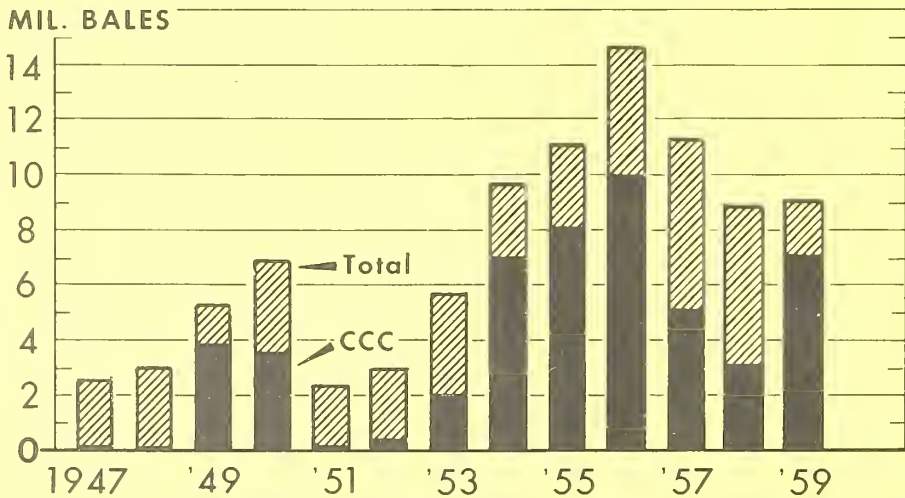
U. S. DEPARTMENT OF AGRICULTURE

NEG. 498-59 (9) AGRICULTURAL MARKETING SERVICE

Figure 5

CARRYOVER AND CCC* STOCKS OF COTTON

MIL. BALES



* INCLUDES COTTON POOLED, OWNED AND LOANS OUTSTANDING

U. S. DEPARTMENT OF AGRICULTURE

NEG. 7451-59 (9) AGRICULTURAL MARKETING SERVICE

Figure 6

UNITED STATES DEPARTMENT OF AGRICULTURE
Agricultural Marketing Service

OUTLOOK FOR DAIRY PRODUCTS IN 1960 AND BEYOND

Talk by H. C. Kriesel
Agricultural Economics Division
at the 37th Annual Agricultural Outlook Conference
Washington, D. C., 11 A. M., Thursday, November 19, 1959

Some words of cautious optimism can be used to describe the dairy outlook for 1960. Even this seems like real progress after 7 years of prices riding support levels and moderate to heavy support buying by the CCC. As you have gathered from the past 3 days of these outlook discussions, not many other significant sectors of agriculture hold promise of improvement for 1960 comparable to that for the dairy industry. Unfortunately, however, the improvement foreseen for dairy for 1960 probably will not bring a permanent solution to all long-term dairy problems. With a decline in beef prices in prospect within the next few years, there is the possibility that production will increase enough again to cause surpluses.

Improved prospects for milk prices in 1960 reflect the recent downward adjustment in milk production. This followed 5 consecutive years of new production records. The downturn in milk production in the past 2 years is a consequence primarily of a rise in beef cattle prices compared with milk prices, although adjustments were taking place in dairying for other reasons also.

In a compact package, here is the outlook for 1960. Even with some increase in milk production next year, as now appears likely, the supply of milk products per person will be under the level of 1959. With consumer incomes at a new record high, retail prices will rise. For considerable periods in 1960, prices to farmers for milk and butterfat probably will be above 1959 levels. The 1960 average is practically certain to be above 1959. The volume of dairy products sold by farmers in 1960 will be a new record high. Cash receipts will increase significantly over 1959 to a new high record. Costs of feed may be lower in 1960, but costs of most other items used in production probably will be higher. Net income from the dairy enterprise probably will total at least as high as in 1959, if not a little higher.

So much for the main conclusions about the 1960 outlook. Now what about the reasons?

The gradual increase in milk production from 1954 through 1957, and the leveling-off since, has been the result of a precarious balance among three factors, (1) rising production per cow; (2) rising numbers of cows per farm; and (3) reduction in total numbers of milk cows associated with the rather sharp annual reductions in number of farms with milk cows. The third factor, especially, has become subject to the growing influence of changes in the beef cattle industry. Hog prices and feed prices also have had some effect.

The growing influence of the beef cattle industry on the dairy industry stems from the fact that the demand for beef is expanding

relative to other farm products and is attracting resources from several farm enterprises. Most resources normally used in dairying are better suited to beef cattle farming than to other enterprises. For a number of years there has been a net relative transfer of resources out of dairying. The rate of such transfer has depended considerably upon the relationship between beef prices and milk prices.

A brief letup in the transfer out of dairying could lead to a substantial rise in milk output, within a comparatively short time. All too clear in the minds of many of us is the rise of 5.5 billion pounds of milk in the single year 1953. That is the only year since 1944 that total milk cow numbers increased. Output per cow jumped in 1953, also.

The number of beef cattle has been building up rapidly the last 2 years, after a record short period of decline. The end of increase is not in sight. But in 1960 marketings for slaughter probably will begin to increase, and prices are likely to begin a decline. Widespread drought could easily trigger a rapid increase in sales and sharp decline in prices.

Within the next 5 years, with lower beef prices in prospect together with continued large roughage supplies and growing supplies of feed concentrates, a substantial increase in milk output is likely. The stage for such a reaction probably will be set in 1960, with just enough price strengthening among dairy products to give farmers renewed confidence.

Over the next decade, the rise in population will bring a substantial increase in total demand, but whether total demand will rise fully as much as, more than or less than the population depends upon several cross-currents affecting per capita demand. Per capita demand will be enhanced by the growing proportion of our population which is in the young, milk consuming age-group. Also, a higher percentage of families will be in upper income groups where consumption of dairy products tends to be higher. We must remember, though, that in the past decade, there also was a shift in age composition to the younger levels, and with prospective growth in upper ages, the effect of this factor in the next decade may be less than we might first suppose. Moreover, while there was a substantial shift in families to higher income levels in the past decade, demand for dairy products on a milkfat basis showed a further decline. Prices of vegetable oils may drop still further relative to milkfat prices, possibly inducing further substitutions for milkfat, and, as in the past decade, for reasons best known to individual consumers, there may be still further shifts in their tastes and preferences away from some dairy products.

The net effect of these influences is likely to be no increase in per capita demand for dairy products, measured on a milkfat basis. There may be some further decreases during the next 10 years. On the other hand, some further increase in per capita demand, measured on a solids-not-fat basis, is likely. Per capita consumption of milk solids-not-fat has increased about one-fifth in the past two decades.

I would like to conclude by considering briefly the question "Is the dairy industry a declining industry?" One cannot but be impressed by the large proportion of the numerical measures of the dairy industry

which are pointing downward -- cow numbers, number of farms with milk cows, consumption of cream, of butter and of evaporated milk -- in fact, consumption of all milkfat, and production of milk per person. The latter has declined from 821 pounds in 1960 to a record low of 705 pounds for 1959, and a still lower level is in prospect for 1960.

The hourly incomes of people engaged in dairy farming are near the bottom end of the scale among major types of farms, and the people involved are not inclined to accept as their only salvation the fact that they have such a wonderful opportunity to work still longer days. The unwillingness to accept these conditions presumably accounts for the net relative transfer of resources out of dairy farming.

On the other hand, a number of measures point to growth for the dairy industry. The more comprehensive one is per capita consumption of milk solids-not-fat. This has been the "sleeper" development within the dairy industry. There is a reawakening as to the importance of this component of milk. It provides the real reason why dairy products rank so high in the recommendations of all nutritionists and other consumer advisors. Within recent weeks the role of this item took on a strong international flavor. I refer here to the anxiety expressed from many quarters when the supplies of nonfat dry milk for certain overseas nutrition-bettering programs became exhausted.

For the time being, excess supplies of solids-not-fat still constitute a weight around the price-making neck of the dairy industry. The transition from separating cream on farms to selling all solids in whole milk has been going on since the mid 1930's and is now a little over two-thirds completed. Perhaps at least another decade will go by before all of it so destined actually reaches the commercial market. "Equilibrium" for this component of milk, as well as for milkfat, is needed to bring permanently better days to the dairy industry.

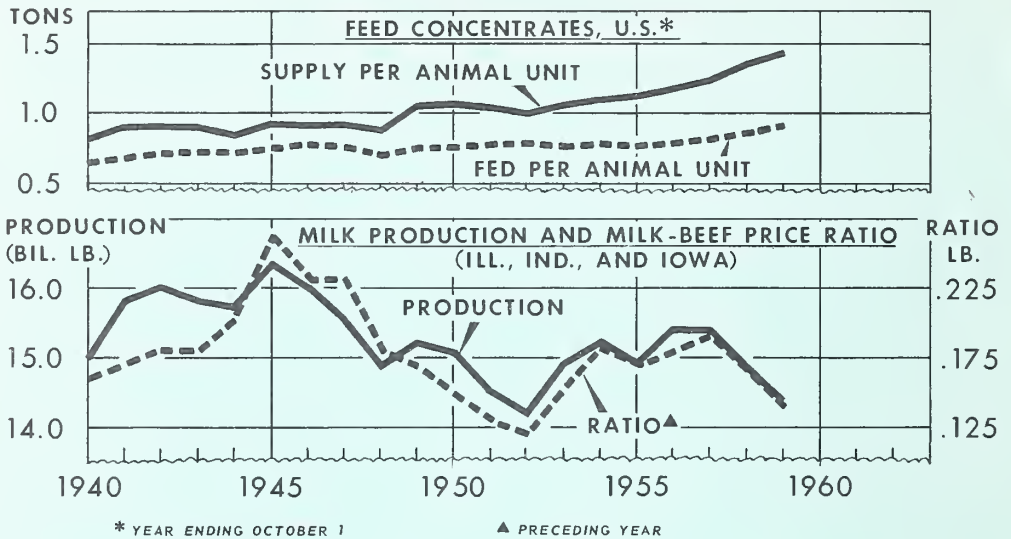
USDA price support purchases as percent of production of milkfat and solids-not-fat

Year	Production		USDA purchases		Quantity of milk solids contained in purchases as a percentage of production	
	Milkfat	Solids-not-fat	Milk solids contained in purchases of butter, cheese, and nonfat dry milk:			
			Milkfat	Solids-not-fat	Milkfat	Solids-not-fat
	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Pct.	Pct.
1945	4,796	10,857	---	---	---	---
1946	4,717	10,683	---	---	---	---
1947	4,691	10,630	---	202.4	---	1.9
1948	4,518	10,230	---	---	---	---
1949	4,631	10,530	100.2	320.8	2.2	3.0
1950	4,646	10,557	138.0	371.7	3.0	3.5
1951	4,529	10,366	.4	51.6	1/	.5
1952	4,492	10,356	13.8	50.4	.3	.5
1953	4,667	10,847	382.6	656.0	8.2	6.0
1954	4,725	11,006	345.9	711.2	7.3	6.5
1955	4,746	11,091	179.0	580.2	3.8	5.2
1956	4,803	11,293	193.1	781.9	4.0	6.9
1957	4,797	11,335	217.4	857.3	4.5	7.6
1958	4,742	11,271	174.6	923.1	3.7	8.2
1959	4,715	11,223	122.2	692.5	2.6	6.2

1/ Less than 0.05 percent. 2/ Preliminary. 3/ Partly forecast.

Data published in the Dairy Situation (AMS).

MILK PRODUCTION, MILK-BEEF PRICE RATIO AND FEED SUPPLIES

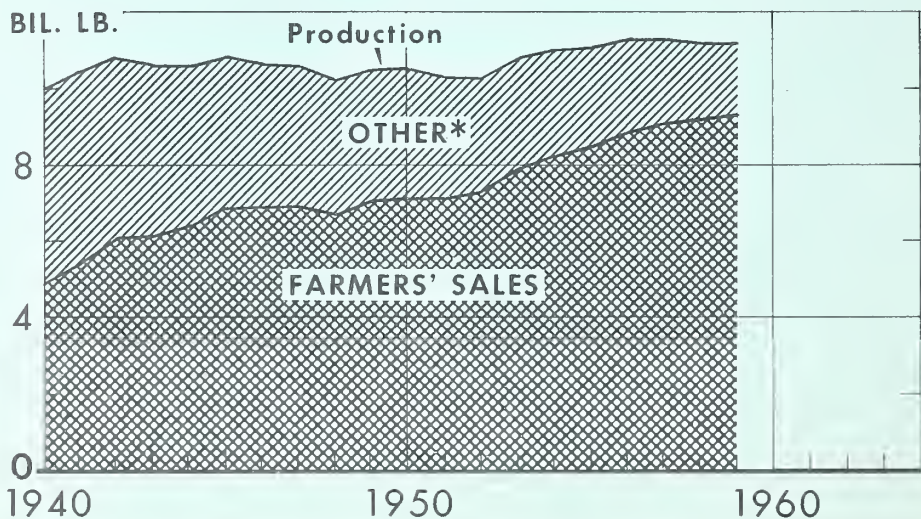


U. S. DEPARTMENT OF AGRICULTURE

NEG. 7556-59 (10) AGRICULTURAL MARKETING SERVICE

SOLIDS-NOT-FAT

Production and Farmers' Disposition



* USED ON FARMS FOR FDD, LIVESTOCK FEED, AND WASTED

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UNITED STATES DEPARTMENT OF AGRICULTURE
Agricultural Marketing Service

OUTLOOK FOR EGGS AND POULTRY IN 1960

Talk by Edward Karpoff, Agricultural Economics Division
at the 37th Annual Agricultural Outlook Conference
Washington, D. C., 9:15 A. M., Thursday, November 19, 1959

There are times when the only possible change in a situation is improvement. Taking 1959 averages as a base, the poultry industry would seem to have arrived at that position. But that conclusion cannot be stated absolutely, without reservation or qualification, because if the industry were to respond confidently to the conclusion, the prediction would not materialize. In short, our outlook forecasts are built around an assumption of adjustments toward an equilibrium, within the scope of the relatively limited flexibility that is possible for producers who, for the most part, have become rather specialized.

With the usual qualifications that are necessary in describing the future in an industry that is full of uncertainties, it seems that 1960 aggregate output of eggs and poultry meat will be little if any above the 1959 output, so one of the 1959 pressures toward low prices will be relieved. Remember that during the spring of 1959, egg production was as much as 11 percent above the year before. In one month - March - broiler chick hatchings were up 20 percent, and the total 1959 turkey crop is a record, 5 percent above the year before. In 1960, egg production is likely to be a little below 1959; broiler production up slightly, but only on account of late-season increases; and turkey production may merely duplicate, or only slightly exceed, the 1959 record.

The evidence already points toward these expectations of no run-away production increases. The October 1 flock of potential layers was 4 percent below the comparable date a year earlier; this suggests a January 1, 1960 laying flock that will fall below year-earlier by a slightly smaller percentage, perhaps 3 or 4 percent. Particularly at the higher end of that range, the potential reduction in flock size is greater than is likely to be offset by increases in rate of lay.

Birds already included among current potential layers and in recent chick hatchings are the source of egg supply to mid-summer 1960. After that, egg production will increasingly be influenced by pullets that are not yet hatched. I think that forthcoming hatches will reflect the very sobering influence of low egg prices in the year now closing. Certainly the 16 percent cuts in September hatchings of egg-type chicks, and in October 1 eggs in incubators, are consistent with this belief. Actually, I expect the average cut in the hatch to be smaller than the October decline of 16 percent - a 5 or 6 percent cut is more likely. But that would be a deeper cut than could be fully offset by increased rates of lay per bird.

The result is likely to be smaller egg production in 1960 than in 1959, and the production will be divided among a larger population. The inevitable result will be a decline in per capita supplies, and hence in per capita consumption. But on account of the seemingly declining demand for eggs, we should not look for sharp price rises for eggs. My judgment

is toward an annual average increase of perhaps 2 or 3 cents per dozen above the prospective 1959 average of about 32 cents per dozen. The increase probably won't begin until about the second quarter of the year.

For the first half of 1960, indications for broiler production also point downward. These indications may result in cuts sharp enough to raise prices to levels that will induce increases in output in the last four or five months of the year. In that event, production for the year may be 3 or 4 percent above the prospective 1959 output of 1.7 billion broilers. Prices probably will be slightly higher than the 16 cents in sight as the 1959 average.

Marketings are still under way from the record 1959 turkey crop of 82 million birds, and the year seems to be closing with prices firm. This may induce a repetition in 1960 of the current record crop which would likely sell at prices not much different from the 23 cents per pound foreseen as this year's average. We already have a survey of farmers' intentions to keep turkey breeder hens: this calls for a 22 percent increase over last year in the number of heavy white breeder hens to be on hand January 1, 1960; a 9 percent decrease in Bronze hens, and a 16 percent decrease in Beltsvilles. This averages out to a 4 percent decrease. The possibilities for increases from these intentions depend upon prices remaining firm, and for a continuing increase in the poults raised per breeder hen kept. Both of these seem realistic, and they suggest that a prediction of another large turkey crop in 1960 is well within reason.

The breeder intentions fail to reflect the fact that heavy tom turkeys in the past year have been the only class consistently higher-priced than the year before. This may induce greater departures from intentions for Bronze turkeys than for the other varieties.

The outlook that I have drawn for you will result in an increase in the income of poultry farmers for 1960. The value of their production in 1959 will be on the order of \$3.1 billion; for 1960 it may be about \$3.3. Because the increase will be mostly a consequence of higher prices rather than of larger volume, and because slightly declining feed prices are likely to keep production costs steady, most of this increase in gross income will be carried over into net income.

These are the highlights of the outlook; it is reasonable to ask if there are background factors influencing these prospective prices and quantities which we should discuss for a better understanding of the issues. There are a host of such items, few of which would fit into a 10-minute speech, and all are in areas where our information is less than perfect. I can only mention a few of these topics, in the hope that you folks from the States have first-hand information that you can add to the informal discussion that has always been a part of our outlook sessions. Among the topics on my list are:

1. The price-cost squeeze.
2. Further developments in integration and contracting.
3. Egg price quotation systems, and price determination.
4. The declining demand for eggs.
5. The size of the export market.

Your chairman probably has an even longer list. He'll give you a chance to make suggestions concerning additional items that you have. I turn you back to him.

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE

THE OUTLOOK FOR FATS, OILS, AND OILSEEDS IN 1959-60

Statement presented by George W. Kromer
Agricultural Economics Division
at the 37th Annual Agricultural Outlook Conference
Washington, D. C., 1:30 P. M., Tuesday, November 17, 1959

The outlook for food fats and oils in the 1959-60 marketing year is dominated by the record large supplies in prospect. Both domestic and export demand will continue strong. Prices of the major food fats -- excluding butter -- are likely to average somewhat lower than in the past year mainly because of larger production.

Beginning stocks of food fats (including oil equivalent of soybean carry-over) on October 1, 1959 were up sharply and output will be greater. Prospects are that the total supply of edible fats, oils, and oilseeds in 1959-60 will be nearly a tenth above the record disappearance last year and 5 percent above the supply available last year.

Exports have become an increasingly important market for food fats and oils. During the past two decades, U. S. production has increased more sharply than domestic use. As a result, large quantities have become available for export. Exports of food fats and oils, including the oil equivalent of oilseeds exported in 1958-59 were equal to about 28 percent of domestic production. Export prospects in 1959-60 again will be the major consideration as exportable supplies are well above last year.

Fortunately, the export outlook is favorable. Without taking into account the possible effect of foreign buying to build up stocks, current indications are that exports of edible fats, oils, and oilseeds (including oil equivalent of soybeans) through September 1960 may total about 3.6 billion pounds compared with the record 3.3 billion pounds shipped abroad in 1958-59. Soybean exports in 1959-60 are expected to set a new record of about 125 million bushels compared with 110 million bushels last year, as the factors generating the expansion last year are likely to continue to operate. Exports of cottonseed oil and soybean oil are expected to equal or exceed the 1.3 billion pounds shipped abroad in 1958-59. Exports of edible oils under Government programs probably will be down whereas dollar shipments will be greater than last year. Lard exports during 1959-60 are forecast at 750 million pounds compared with 605 million last year.

Cotton oil exports during 1959-60 are expected to rise nearly 60 percent above the 404 million pounds shipped last year. Both sales for dollars, mainly to northwestern Europe, as well as shipments under P.L. 480 would share in the rise

If total exports of soybean and cottonseed oil in 1959-60 are about the same as last year, then exports of soybean oil would decline sharply from the 930 million pounds shipped during 1958-59 since more cottonseed oil is expected to go out. However, low prices for soybean oil (currently the lowest since the April 1941 monthly average of 7.6 cents per pound) plus limited supplies from other exporting countries may be reflected in larger exports of U. S. soybean oil than can be seen at present.

Estimates of edible oil exports from the U. S. in 1959-60 could prove conservative since if any significant changes should occur in exportable supplies from other countries it is likely to be on the downward side.

Reports indicate drought in China with significant adverse effect on peanut and cotton crops but not much effect on the soybeans. The supply of peanuts from Africa is expected to be smaller, and the supply of copra is expected to remain relatively tight through mid-1960, mainly reflecting the cumulative effects of drought in the Philippines. Olive oil production in the Mediterranean Basin, particularly Spain, is expected to show a substantial increase, and will reduce the level of imports of other edible oils taken by some of these countries. Dry weather reduced sunflower seed production in Russia, its major oilseed crop. Sunflower seed, peanuts and cottonseed in the Argentine are down sharply and supplies will continue smaller through next spring before new crop supplies are available. Rapeseed output in Canada also is substantially below 1958.

The supply of fats and oils from sources outside the U. S. appears to be relatively tight. This plus low prices for U. S. edible oils should encourage a heavy export movement of edible oils and soybeans from the U. S.

Now let us look at the prospects for individual commodities.

The 1959-60 supply of soybeans is placed at 590 million bushels, just 5 million below last year's high. The record carryover on October 1, 1959 of 62 million bushels, 41 million above the same date a year earlier, nearly offset the 8 percent decline in the 1959 crop. However, "free" supplies going into the new marketing year were about 7 percent less because about 42 million bushels of old crop beans were in the hands of CCC compared with only 14 million held a year earlier, and another 13 million bushels of 1958 crop beans were resealed in farm storage.

The smaller 1959 soybean crop brings supplies closer in balance with market outlets than last year, mainly because of the prospective increase in bean exports. Soybean prices have been unusually strong for this time of the year, having moved up from \$2.10 per bushel at Chicago on October 1 to \$2.25 in early November, about 13 cents above November 1958. This reflects delayed harvesting and marketings due to wet weather along with farmers storing large quantities of beans coupled with strong crusher and export demand. CCC soybean sales in recent weeks have been brisk amounting to about 22 million bushels since October 1. Soybean prices to farmers in 1959-60 are expected to average little above the \$2.00 per bushel received last year.

Demand for soybean meal is expected to continue strong in 1959-60 and is likely to be the most important determinant in the level of soybean crushings. Livestock numbers are increasing along with a high feeding rate per animal unit, and soybean meal export prospects appear quite bright. Soybean crushings in 1959-60, based primarily on projected requirements for soybean meal, may total 400 million bushels or more. The trade estimate of annual soybean crushing capacity is around 500 million bushels.

Domestic demand for soybean oil in 1959-60 is expected to continue strong but will face increased competition from larger supplies of cottonseed oil and lard. Assuming that food fat use per person will remain about the same as in

1958-59, it appears that domestic use of soybean oil in 1959-60 probably will not vary greatly from the record level of 3.3 billion pounds last year. Therefore, a bean crush of 400 million bushels would produce over a billion pounds of soybean oil in excess of domestic requirements. This would become available for export or for addition to carryover stocks.

Prospects are that soybean oil prices (crude, Decatur) during the 1959-60 marketing year likely will average somewhat below the 9.5 cents per pound in 1958-59. The current price of bean oil is 8.2 cents per pound and it is quite likely that prices later in the year could go moderately below this level. The outlook for lower prices in the coming year in spite of the prospective record demand for food fats reflects the sharply increased output of competitive cottonseed oil and lard. Heavy supplies of vegetable oils and lard will exert downward pressure on the general level of food fat prices. Last season, bean oil prices were helped to be maintained by the record domestic and export demand -- mainly P. L. 480 -- for soybean oil and other food fats and the CCC acquisition and subsequent export sale of 174 million pounds of cottonseed oil (crude plus refined).

With strong foreign demand for soybeans, exports are forecast at 125 million bushels, about 15 million above 1958-59. If seed and feed requirements are about the same as in recent years and crushing and export estimates are reasonably accurate, carryover stocks of soybeans on October 1, 1960 may be in the neighborhood of 35 million bushels, only about half as much as this year. Part of these probably will be in the hands of CCC.

Cottonseed production in 1959-60 is placed at 6,142,000 tons, 28 percent more than a year ago. Cotton acreage is up sharply this year, mainly because much of the 5 million acres placed in the Acreage Reserve in 1958 are back in production, and yield per acre is record high. Prices to farmers are expected to average slightly above the 1959 CCC purchase price of \$34 per ton, basis grade (100) but less than last season's average of \$43.80.

Cottonseed oil output in 1959-60 is forecast at 1,900 million pounds, about 400 million pounds above last year. The additional output of cotton oil will largely be absorbed by strong foreign demand for this oil but domestic use will also be higher. This is anticipated as resulting in the continuation of a price premium of cotton oil over soybean oil even though cotton oil prices in 1959-60 likely will average a little below last year, because of the general downward movement in edible oil and lard prices.

Lard output in 1959-60 is forecast at 2,925 million pounds, about 8 percent more than last year. The increase reflects a prospective rise in hog slaughter as well as slightly higher lard yield per hog. Lard prices probably will average somewhat lower than in 1958-59. More lard is expected to be used in the manufacture of shortening because of its cheapness relative to the edible vegetable oils. The USDA is currently purchasing limited quantities of lard with Section 32 funds for domestic donation to needy persons and eligible institutions. Through early November, the Department had bought 28 million pounds of lard.

The outlook for lard exports in 1959-60 appears quite favorable mainly because of lower U. S. prices and some production decline in several large U. S. markets in Europe. Furthermore, bulk tanker shipments of liquid lard direct to the U. K. through the St. Lawrence Seaway and other ports has made our lard more competitive with continental European lard in the British market, reducing the delivered price in the U. K. by at least a cent a pound. Lard exports and shipments during 1959-60 are forecast at 750 million pounds, up nearly 25 percent from last year. Lard has again been made eligible for shipment under P. L. 480, but so far none has been programmed.

Domestic disappearance of food fats and oils in 1959-60 is expected to average about 46 pounds (fat content) per person, close to the year-earlier rate. The pattern of use per person is expected to closely parallel that indicated for 1958-59. During 1958-59, some increase was registered for shortening and salad and cooking oils whereas the direct use of lard was down. Per capita use of margarine in 1958-59 remained at the record level of the year before while butter use slipped again.

The domestic flaxseed situation during 1959-60 is expected to be relatively tight. The 1959 crop dropped sharply about 45 percent from last year to about 22 million bushels and stocks are low. The total supply of flaxseed in 1959-60 marketing year is placed at about 37 million bushels, 11 million less than a year earlier. Crushings for oil may be around 22 million bushels and another 3 million will be needed for seed. With exports of about 8 million bushels (over 5 of which have already moved out) carryover stocks on July 1, 1960 probably will be at the very low level of about 4 million bushels. Therefore, CCC's holdings of 54 million pounds of linseed oil (about 2.7 million bushels flaxseed equivalent) constitutes the entire visible surplus above minimum domestic requirements.

The generally tight situation means that prices to farmers this year will average sharply above the \$2.69 received for the 1958 crop.

Present indications are that exportable supplies of flaxseed (including the seed equivalent of linseed oil) from the 1959 crops in foreign countries may be down at least 5 percent from the 43 million bushels of last year. Flaxseed production in Canada is down only slightly from 1958 -- although acreage sown decreased 9 percent, an increase in yields almost offset the decline. However, a large part of the crop is still under snow and it is uncertain how much of it will be able to be harvested next spring. Not much change from last year is likely in the Argentine crop. Canada, Argentina and the United States are the three major exporting countries.

The outlook for linseed oil prices indicates that they will continue well above last year during the remainder of the 1959-60 marketing year. They may even increase further from current levels as supplies become scarce. The relatively high level of linseed oil prices during the current marketing year likely will have the effect of reducing consumption of linoil as users of drying oils tend to shift to lower priced substitutes. The prolonged steel strike this year also will have an adverse effect on the consumption of linseed and other

drying oils because of the lower level of industrial activity. Consumption of linoil has shown a sharp downtrend in the last decade and prospects are it will show a slight decline this year.

Supplies of tung oil in the 1959-60 marketing year are placed at about 106 million pounds, about the same as the year before. This would be enough tung oil to satisfy domestic requirements for two years at current consumption levels. Current prospects indicate tung nut and oil prices to producers will average near the support level which is virtually the same as last year. Large carryover stocks (mostly in the hands of CCC) along with the oil likely to be imported under the quota plus another large domestic crop in 1959 likely will keep prices from rising much above the loan level during most of the 1959-60 marketing year.

Inedible tallow and grease output in 1959-60 is forecast at 3.3 billion pounds compared with 3.1 billion the year before. The rise would reflect the anticipated increase in cattle and hog slaughter. The outlook for the year ahead is for relatively low inedible tallow prices as output rises in 1959-60 and stocks remain large. No real relief in tallow prices is probable until livestock slaughter turns downward again.

UNITED STATES DEPARTMENT OF AGRICULTURE
Agricultural Marketing Service

OUTLOOK FOR FEED IN 1960

Talk by Malcolm Clough
Agricultural Economics Division
at the 37th Annual Agricultural Outlook Conference
Washington, D. C., 1:00 P.M., Wednesday, November 18, 1959

Total supplies of feed grains and other concentrates for 1959-60 have increased to a new record high, 7 percent larger than the big supply last year. This, however, is not an unusual development in the feed situation. Supplies have set new records in each of the past 6 years. Total feed concentrate supplies, including feed grains and byproduct feeds, have increased rather sharply in the last 3 years, following a more moderate increase during the years from 1952 to 1956. The supply for the 1959-60 feeding year will total around 265 million tons, 18 million more than last year making the 7th year of steadily increasing supplies. The supply this year is nearly 100 million tons above supplies at the beginning of the 7-year rise. This is an average annual increase of around 14 million tons. Increasing production and mounting stocks have shared about equally in this rise in supplies. Each has gone up on an average of about 7 million tons per year.

High yields per acre in recent years have been important in boosting feed grain production and stocks. The average yield of the four feed grains has set new records in 1957 and 1958 and repeated last year's high again in 1959. The yield of corn this year was slightly above the record yield of last year and sorghum grain yield was only slightly lower. Weather was less favorable this year for oats and barley as drought cut yields in the Northern Plains, and average yields for the country fell below the record highs last year. The high aggregate yield of the four feed grains this year is due in part to the shift from other feed crops to corn, which yields greater tonnage per acre than the other feed grains.

Over the past 20 years, there has been little net change in the total acreage planted to feed grains. Corn acreage has trended generally downward during this period, but it has been about offset by increasing acreages of barley and sorghums. In 1959, with the termination of controls on corn and the discontinuance of the corn acreage Reserve Program, corn acreage increased 14 percent. The 85 million acres planted to corn was the largest in 10 years. This was partly offset by a decline in the acreages of the other feed grains, but the total feed grain acreage increased about 6 percent over 1958 and was above most of the postwar years.

The 1959 feed grain crop resulting from this larger acreage and high yield totaled 167 million tons, nearly 10 million over the previous record output in 1958. Thus, feed grain production continued an upward trend that has been underway for a number of years. The bumper crop this year is around 50 million tons above a normal crop at the close of World War II.

Total utilization of feed grains has increased along with production in recent years. But utilization has generally fallen below production. Since 1948 only 2 feed grain crops, those of 1950 and 1951, have been less than our total requirements. In the years from 1952 to date, total production (plus imports) has exceeded total utilization each year by 4 to 10 million tons.

Domestic use and exports of feed grains are expected to increase again in 1959-60. Increasing utilization reflects not only increasing livestock numbers, but also heavy feeding of grain and other concentrates per head of livestock. In 1958-59 the rate of feeding per animal unit was 11 percent above the 1953-57 average. The number of grain-consuming livestock is expected to increase about 3 percent in 1959-60. Feeding per animal unit is expected to continue liberal and the total domestic use probably will be a little heavier than in 1958-59. Exports reached a new high of 12.8 million tons in the 1958-59 October-September feeding year and are expected to be at least as large again in 1959-60. The bumper crop produced this year will again exceed our total requirements--probably by a little greater margin than for other recent years. This will mean that feed grain carryover stocks, which have increased steadily over the past 7 years, will be up again in 1960. The carryover into 1960-61 may be up to around 80 million tons which would be about 13 million tons larger than at the beginning of the 1959-60 season.

Practically all of the increase in the total carryover of feed grains since 1952, when stocks totaled about 20 million tons, has gone into Government holdings as farmers have delivered substantial quantities of grain to CCC each year under the price support program. Nearly 85 percent of the record 1959 carryover stocks were owned by CCC or under the Government loan program.

Corn and sorghum have been largely responsible for the total increase in feed grain supplies in the past 3 or 4 years. Corn supplies reached 4 billion bushels for the first time in 1955, then increased to over 5 billion by 1958. This year the supply will be up to nearly 6 billion bushels. The 1959 crop of over 4.4 billion bushels is a sixth larger than the big 1958 crop and more than a third above the 1953-57 average. Production is expected to exceed total 1959-60 utilization by 500 million bushels or more, increasing the carryover into 1960-61 to over 2.0 billion bushels.

The supply of sorghum grain in 1959-60 for the first time will total over 1 billion bushels, 16 percent above last year and more than 3 times the 1953-57 average. This is the third year of favorable weather for sorghum production in the Great Plains and Southwest. Carryover increased sharply following the bumper crops of 1957 and 1958 reaching a record high of 501 million bushels this year. Total utilization of sorghum grain is expected to be substantially larger in 1959-60 than the 423 million bushels used domestically and exported in 1958-59. Even so, some further increase is in prospect for October 1, 1960, probably by another 10 percent to around 550 million bushels.

In contrast with the big corn and sorghum grain supplies, the 1959-60 oats supply is down 17 percent from last year, as farmers reduced their 1959 acreage and yields dropped below the record high reached in 1958. Total utilization of oats for the 1959-60 marketing year is expected to be down about 10 percent from 1958-59. Even so, the carryover on July 1, 1960 is expected to be down to around 200 million bushels, the smallest carryover since 1948.

The barley supply for 1959-60 is 5 percent less than in 1958-59, but a fourth larger than the 1953-57 average. The 1959 crop was down 13 percent from the record output last year. The reduction was almost entirely in the important malting barley producing area of the mid-west where drought cut 1959 yields. Carryover of barley into 1960-61 also is expected to be down--probably by 15 or 20 percent from the record carryover on July 1, 1959, but it will still be above average.

The total tonnage of high-protein feed available for feeding in the 1959-60 feeding year is expected to be a little larger than the supply for 1958-59. This is a continuation of the upward trend in the total supply of protein feeds which brought total supplies in 1958-59 to over 15 million tons, 20 percent above the 1953-57 average. Soybean meal made 9 million tons of this total. Another large supply of soybean meal is in prospect for 1959-60, probably maintaining supplies for domestic use at near the 1958-59 level. Most of the increase in total supplies will come from the increased cottonseed crush--expected to be a fourth larger than in 1958-59. The number of high-protein feed consuming animal units also are expected to be up a little in 1959-60, but the quantity available for feeding per animal unit is expected to equal, and may exceed, the record tonnage for 1958-59.

The 1959-60 hay supply is down 6 percent from the record supply last year, but is above the 1953-57 average both in total and per animal unit. Hay supplies are ample in most areas, but they will be short in an area centering in the Dakotas. Forage supplies have been supplemented by generally good pastures and ranges over most of the country this summer and fall. During the past 3 years, drought areas have been small. This year they were confined principally to the Northern Great Plains.

Feed grain prices are expected to average a little lower in 1959-60 than in 1958-59 in view of record 1959 production and the decline in the general level of livestock prices which is expected to reduce the demand from some livestock producers. Feed grain prices have continued low in relation to prices of livestock and livestock products during 1958-59, although the wide gap of 1957-58 has narrowed some. Livestock-feed ratios are expected to continue favorable to dairymen and cattle feeders in 1959-60. The hog-corn ratio has declined rather sharply from the very favorable level of a year ago and is expected to be only about average in 1959-60. Prices of poultry and eggs are expected to continue lower than average relative to feed costs.

The decline in feed prices in 1959-60 is expected to be principally in corn and sorghum grain. The bumper 1959 corn crop brought the U.S. average price of corn in October to 99 cents per bushel, 5 cents per bushel lower than a year earlier. While the 1959 Government support

price of \$1.12 per bushel, available to all producers this year, is a price strengthening factor, corn prices probably will continue lower than a year earlier during the 1959-60 marketing year. Corn prices have fallen substantially below the support level this fall during the period of heavy marketings. Prices probably will rise seasonally to near the 1959 support level by next spring and summer.

The average price received by farmers for sorghum grain declined more than seasonally from \$1.85 per cwt. in June to \$1.48 in October. This was 9 cents per cwt. lower than a year earlier and 4 cents below the 1959 support rate. Sorghum grain prices this fall also are low in relation to other grains which will encourage liberal feeding and heavier total disappearance. Sorghum grain prices probably will advance seasonally this winter and spring, although the rise may be somewhat less than the 18 percent rise from October to May in 1958-59.

Prices of oats and barley have been relatively high this summer and fall, reflecting the smaller crops of these grains. Prices of both these grains have been above the 1959 support level since harvest time. They are expected to continue relatively high in 1959-60, and the quantities going under price support probably will be much less than in other recent years.

High-protein feed prices in 1959-60 may average near the 1958-59 level. Total production of high-protein feeds is expected to be larger than in 1958-59, but livestock numbers also will be up. Also, a stronger foreign demand is in prospect as a result of the drought this fall in a number of European countries which normally import substantial quantities of oilseed meals.

Exports of feed grains have increased sharply in recent years, reaching a record level of nearly 13 million tons in the 1958-59 October-September feeding year. The increase in feed grain exports from the United States has resulted from increased demands in foreign countries, especially in Western Europe, and big supplies available in this country. The total tonnage exported in 1959-60 is expected to equal, if not exceed, the record level of 1958-59.

Exports of corn and sorghum grain from the United States are expected to be a little above the high levels reached in 1958-59. While barley will have more competition from Western Europe this year than last, exports are expected to be about as large as last year, while smaller exports of oats are in prospect.

The United States has increased its share of the expanding world trade in feed grains. While a number of the other feed grain exporting countries have benefited from the growth in foreign feed grain needs, the major part of the increase in imports by deficit producing countries has come from the United States. United States exports of feed grains have increased from 5.0 million short tons in 1951-55, 34 percent of the world total, to nearly 13 million tons in 1958-59, which was 51 percent of the total.

UNITED STATES DEPARTMENT OF AGRICULTURE
Agricultural Marketing Service

OUTLOOK FOR FOOD IN 1960

Talk by Harry Sherr
Agricultural Economics Division
at the 37th Annual Agricultural Outlook Conference
Washington, D. C., 9:15 A.M., Wednesday, November 18, 1959

The overall food situation in prospect for next year is similar to that for 1959. Supplies are expected to continue very large, and adequate to maintain civilian consumption of food in 1960 at about the present year's per capita rate. The rate in 1959 is estimated to be slightly higher than last year and 3 percent above the average for the immediate postwar period (1947-49). Consumer income, sustained by a high level of economic activity and employment, probably will be record large next year. This will likely be reflected in the continuation of a strong demand for food.

Retail food prices are expected to average a little lower in 1960 than this year. This will likely be mainly for the same reason as in 1959 -- lower prices to farmers for several important food commodities, such as meat animals, which will be in heavier supply. Food processing and marketing costs may be up a little, partly offsetting the expected reduction in farm prices. In the present year, the BLS Consumer Price Index **through** September averaged a little higher than in the same part of 1958, with the decline in retail food prices almost offsetting the increase for consumer nonfood goods and services.

The record high flow of disposable personal income likely for next year points to some increase over 1959 in consumer expenditures for goods and services. For food this will reflect primarily the large population and increased purchases of more expensive foods and more services with food, rather than more food per person. Calculated on a per capita basis, food expenditures are expected to account for somewhat more than a fifth of disposable personal income. This is about the same proportion as estimated for 1959, and a little less than in 1958.

Now for a more detailed review of the food supply and consumption prospects in the year ahead. Supplies are expected to continue large, close to those of the present year. Food stocks will likely be a little higher at the end of 1959 than at the beginning. With average weather, production of food crops will again be large in 1960. There probably will be more beef cattle and calves on farms and ranches this January 1 than last, but fewer dairy cows and heifers. However, the rate of culling of dairy animals will likely be less next year than in 1959, and milk output per cow at a record level. Marketings of hogs in 1960 will be a little larger than in 1959.

Civilian per capita consumption of meat is expected to be a little higher next year. The rate for the present year is estimated at 158.5 pounds. The increase will likely be mostly in beef. Pork

consumption may be up moderately from 1959 in the first half of 1960, with the increase about offset by the reduction in prospect for the second half. For beef, the prospective increase over the 1959 per capita rate may tend to be concentrated in the latter half of the year. The increase would be in medium and lower grades of beef, and reflect some step-up in the slaughter of cattle off grass. Slaughter marketings of this class of cattle have been at a reduced rate since 1958, when farmers began to build up the size of herds. Supplies of the better grades of beef will continue about as plentiful as in 1959. Per capita consumption of veal and lamb and mutton in 1960 may be up somewhat from this year. Average retail meat prices are expected to be down a little from 1959.

A little more milk and dairy products (in terms of total milk solids) will be available in 1960 than this year. Stocks may be somewhat smaller this January 1 than last, but production during the year may equal or even slightly exceed the output estimated for 1959. With the civilian population a little larger next year, per capita consumption of milk and dairy products (on a total milk solids basis) may be at the present year's rate. Among the various products, civilians probably will use about as much fluid whole milk and ice cream per person as this year, and slightly more fluid skim milk products and cream mixtures. However, declines are expected for butter and evaporated milk. With Commodity Credit Corporation stocks likely to be sharply lower than in 1959, USDA distribution of butter will be at noticeably curtailed rates next year. Per capita consumption of evaporated milk has been on the downtrend in the postwar period. This is due to several factors, including a change in infant feeding practices and the increase during the past decade in civilian use of nonfat dry milk, fluid whole milk, and "half and half". Retail prices of milk and dairy products are expected to average at least the same next year as in 1959.

Prospects are that there will be about as much poultry meat (both chicken and turkey) and eggs available next year as this. The postwar uptrend in production of commercial broilers and turkeys each may be restrained in 1960 by low prices relative to production costs. Prices will likely be held down by competition from red meats and by the fact that broiler production can be increased very rapidly if prices rise. Fewer farm chickens will be marketed next year for consumption because of reduced culling of the egg-laying flock. Broilers provide 80 percent of the total chicken meat supply. Because there will likely be somewhat fewer layers on farms this January 1 than last, egg production may be no greater than in 1959 at least until mid-1960. The level of supplies available late in 1960 will depend on the number of replacement chickens raised next spring.

Civilian consumption of chicken meat in 1960 is expected to be only a little below this year's peak rate of 29.8 pounds. The rate for turkey meat may be the same as this year's record of 6 pounds. Per capita consumption of eggs may be a little lower next year than in 1959, continuing the decline of recent years. Retail prices of eggs and chickens in 1960 are expected to average somewhat higher than this year, but those of turkeys will likely be about the same.

Record supplies of food fats and oils will be available in the year ahead, according to present prospects. The increase will likely reflect heavier output of lard and vegetable oils. Exports probably will be heavier than in 1959 mainly because of lower prices, further easing of conditions under which purchases for export can be financed with foreign currencies, and reduced supplies in other areas which sell fats and oils in the world market. U. S. civilian consumption of food fats and oils may total a little higher (in terms of oil equivalent) than in 1959, though on a per capita basis it will be about the same. Retail prices of the fats and oils food products will likely average lower in 1960 than this year.

The supply of grains will continue abundant in 1960. Civilian per capita consumption of cereal food products probably will be about the same as in 1959. Retail prices of these foods are expected to average a little higher next year because of slightly higher processing and marketing costs.

Moderately more processed fruits and about as much processed vegetables will be available during the current marketing season (which will end around mid-1960) as there was in the same part of 1958-59. Supplies of dried fruit will be close to the average of recent years, and much larger than last year's very low level. Among the major fresh fruits, the main changes from a year earlier are reflected in larger supplies of oranges and fewer apples and tangerines. Apples were in very heavy supply in the first half of 1959. Supplies of grapefruit are about as large as a year ago. Production indications for winter-season fresh vegetables are not yet available. However, with demand likely to continue strong, farmers will be encouraged to plant about as large an acreage to these crops as they did a year ago, if weather at planting time permits. Weather also will be a dominant factor influencing the volume of output. Supplies of domestically produced fresh vegetables this winter will be supplemented, as usual, by imports.

Potato supplies through winter 1960 will be noticeably smaller than the burdensome ones of a year earlier. However, they are adequate to permit civilians to consume potatoes at the same per capita rate as in winter 1959. Potato prices this winter are expected to average well above the very low ones of early 1959.

Dry field peas and the white varieties of dry edible beans are in much heavier supply and lower priced this season than last. Crops were noticeably larger this year than in 1958-59--production of field peas was below average last year.

Military purchases of food from domestic supplies probably will be about as large next year as in 1959. Food exports are expected to be up, with the increase likely to be in fats and oils (including oil-seeds) and rice. Our supplies of these foods are heavy.

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE

THE OUTLOOK FOR FRUITS AND TREE NUTS IN 1960

Statement by Ben H. Pubols,
Agricultural Economics Statistician,
at the 37th Annual Agricultural Outlook Conference,
Washington, D. C., 3:45 p.m. Wednesday, November 18, 1959

General Supply and Demand Prospects

From now until mid-1960, total supplies of fresh and processed fruits are expected to be moderately larger than in the same period of 1958-59. Increase in the income of consumers, which was a factor in 1959, is expected to continue during 1960, supporting strong consumer demand for fresh and processed fruits. Demand for fruit for processing should be good in 1960. For exports, the outlook seems generally better in 1959-60 than a year earlier.

Export Outlook

Continuing prosperity in Europe, together with some reduction in import restrictions for fruit items, tends to improve the outlook for exports of most United States fresh and processed fruits in 1959-60. Smaller supplies of European deciduous fruit crops in 1959-60 than in 1958-59 should encourage larger imports of fresh deciduous fruits from the United States. Increased availability of U. S. canned and dried fruits for export in 1959-60 should result in larger exports of these items, though at lower prices than last season. Though competition from foreign dried fruits will be particularly heavy in 1959-60, U. S. exports probably will be larger than in 1958-59, when trade was retarded by relatively light production in the United States. Increased supplies of Mediterranean citrus fruits are expected to continue during the coming season. Export opportunities for U. S. fresh and processed citrus, however, have improved because of increased liberalization of import restrictions in some European countries.

Deciduous Fruits

Total production of deciduous fruits in 1959 was estimated as of October 1 to be about 3 percent larger than in 1958 and 8 percent above the 1948-57 average. The 1959 commercial apple and sweet cherry crops were each about 9 percent smaller than the respective 1958 crops.

The peach crop was a little larger than the 1958 crop and most other deciduous crops were moderately to considerably heavier than last year. Except for sweet cherries and prunes, the major 1959 deciduous fruit crops were above average.

Grower prices for fresh sales of the 1959 crops have varied during the past summer, but generally they were under comparable prices in 1958, a year of lighter production. Prices for fruit for processing also have tended to average under 1958.

Fresh apples, pears, grapes and cranberries from the 1959 crops will continue to be marketed this fall and winter. The sharp reduction in the 1959 apple crop in the Western States, especially Washington, should result in lighter year-end stocks than on December 31, 1958, hence a more manageable supply to handle and market during the first half of 1960. Market prospects, both domestic and export, for apples this fall and winter appear to be more favorable than a year ago. For pears export prospects also are better than a year ago. Whether supplies of fresh grapes will be larger this fall and winter than in this period of 1958-59 will depend largely upon the quantity of California Emperors that go into storage this fall. But supplies of fresh cranberries from the record 1959 crop are expected to continue heavier than a year ago.

Because of heavy increases in dried prunes and raisins, which comprise the bulk of dried fruits, total output of dried fruits in 1959-60 will be substantially larger than the relatively light production in 1958-59. Heavier packs of dried prunes and raisins should result not only in increased consumption in the United States in 1959-60 but also in larger exports. Increased packs of dried apricots, peaches and pears also are indicated in 1959-60, a result of larger fruit crops in California. However, the packs of these items still would be small in comparison with those of raisins and prunes.

The 1959-60 pack of canned deciduous fruits is expected to be moderately larger than the relatively heavy 1958-59 pack. Except for sweet cherries, all major packs so far reported are somewhat larger than the respective packs in 1958-59. A small increase in the 1959 pack of frozen deciduous fruits and berries (excluding juices) appears likely. A heavy increase in the pack of frozen red tart cherries plus some increase in several other items probably will more than offset an expected moderate decrease in strawberries, the leader among frozen deciduous fruits and berries.

Citrus Fruit

Early-season prospects for the 1959-60 citrus crop point to continuance of the upward trend in production that was resumed in 1958-59 following the set back in 1957-58. Larger crops of oranges are expected in 1959-60 than in the past season in all orange States except California. Prospective production of early and midseason oranges is about 3 percent larger than in 1958-59 and 12 percent above the 1948-57 average. Increased production of Valencia oranges also is in prospect in Florida, Texas and Arizona. In Florida, a lighter crop of tangerines but a heavier crop of tangelos are expected in 1959-60.

With the Florida orange crop maturing a few weeks earlier this season than a year ago, movement to fresh markets has been heavier so far this fall. Prices for these early-season sales at shipping points and on the principal auctions generally have averaged under the relatively high prices a year earlier.

Production of grapefruit in 1959-60 (excluding the California summer crop) is currently indicated to be about the same as in 1958-59 and the 1948-57 average. A moderate reduction in Florida is about offset by increases in other States. There are more pink and red grapefruit in Florida and Texas this season than in 1958-59.

As with oranges the Florida and Texas grapefruit crops are maturing a few weeks earlier this season than last. Prices for early-season sales of Florida grapefruit at shipping points and on the principal auctions also have averaged somewhat under a year ago.

Prospects are for another large crop of lemons in California in 1959-60. Moreover, production in Arizona is up sharply this season as plantings made in this State in recent years are increasing in bearing. This constitutes an important addition to total production even though still small compared with the crop in California.

The 1958-59 pack of frozen orange concentrate, made mostly in Florida, was record large. But the Florida packs of canned single-strength and concentrated orange juice were smaller in 1958-59. Output of canned single-strength grapefruit juice was up in 1958-59. Carryover stocks of Florida frozen orange concentrate and canned single-strength citrus juices, except orange, are indicated to be larger this fall than a year ago. Output in 1959-60 is still uncertain.

Tree Nuts

The 1959 crop of the four major tree nuts (almonds, filberts, pecans and walnuts) is 1 percent larger than the 1958 crop and 4 percent above average. The 1959 almond crop is record large, $3\frac{1}{2}$ times the short 1958 crop. The filbert crop is up about a fourth, while the pecan crop is down by about a fourth and walnut crop is down by nearly a third. Grower prices for pecans and walnuts are expected to be higher than in 1958, those for almonds and filberts lower. In recent years, production of the above four tree nuts in the United States constituted about half of the domestic supply of tree nuts, and imports, mainly cashews and Brazil nuts, the rest. Because of lighter supplies in exporting countries, U. S. imports probably will be smaller than in the past season.

This represents mostly the highlights of the 1960 Outlook issue of

"The Fruit Situation" for October 1959,

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by
Mrs. Ethel Hoover, U. S. Department of Labor
before the
Agricultural Outlook Conference
Washington, D. C., November 17, 1959

Housing

A long look ahead for housing and a long look back appeared in two different articles in the same paper last week. 1/ The long look ahead to the year 2000 concerned the probable volume of housing and the size of the industry. The look was taken by Julian H. Zimmerman, Commissioner of the Federal Housing Administration. By the end of the next 40 years, he saw the typical American family having an income almost double that of today, and spending about \$25,000 for a typical house. This combined with a doubling of the population will make the home construction and home furnishings industry about three times larger, dollar wise. For new non farm housing starts, he predicted a rate of about 2.5 million per year, compared with the current 1.3 million. He also saw an increase in the proportion of home ownership - about 65 percent as against the current 60 percent. Of course, he made certain assumptions - no atomic war, no significant inflation, and no major change in the basic aims of Federal policy.

The long look back is of a completely different nature. It is not a flattering view of the building industry and in bringing it to your attention, I do not mean to imply that I agree in all particulars, but it does present an opinion held by many people. It appeared in "The District Line" by Bill Gold - a column that is a skillful blend of seriousness and humor. Gold's comments on housing for the last few centuries touch on the relatively slow rate of technological progress in the home building industry as contrasted with science, medicine, and certain other fields. 2/ He was talking about the need for a functional bedroom. Talking about it is in itself an illustration of progress in the past decade. Before the war, few people heard of or talked about a "functional" anything in housing.

With these two extremes as a kind of background, I would like to review where we are now compared with the last few years, and intermingle a few comments on what is ahead for 1960.

Cost of homeownership and rents

The trend in the costs for both rental and owner-occupied dwellings has been upward for some years. The Consumer Price Index (CPI), which measures price changes for the same qualities from period to period, shows that during the 2-year period from December 1956 to December 1958, rents increased 3.4 percent - 1.9 percent the first year and 1.5 percent the second. However,

1/ Washington Post, November 11, 1959

2/ Statistics were not necessary to make his point. He was hoping that "one of these days a builder with imagination will invent a bedroom that is truly functional." His functional bedroom would be insulated from the noise of the outside, from lights, from heat in summer and drafts in winter. It would be "a place where modern man can recharge his batteries, a haven in which the harried can rest from the tensions of today and prepare for the vicissitudes of tomorrow..."

during 1959, there has been a very slight brake on the upward movement, and the rise from December 1958 to December 1959 will probably be less than $1\frac{1}{2}$ percent.

The expectation for 1960 is that rents will continue to increase moderately, as costs to landlords also go up. As you know, rent levels are influenced by property taxes and repair and maintenance costs, particularly when rental vacancies are as scarce as at present.

Because about $\frac{3}{5}$ of all dwellings are now occupied by home owners, costs for this group are of particular interest. Homeowners in any urban group tend to spend more than renters because they usually invest in better housing; but if equivalent size and quality are compared, costs of rentals and owner occupied quarters are about equal. 1/ The increases in homeowners prices for the same quality, however, have been a bit larger in recent years than for renters. In the CPI, we measure changes in these prices through purchase prices, maintenance and repair, mortgage interest rates, property taxes, and hazard insurance. Prices for this bundle of elements in homeowners costs rose 4.6 percent in the 2 years 1957 and 1958, as compared with 3.4 percent for rents, and they have continued up in 1959. Property taxes--the main source of revenue for local jurisdictions--have been increasing steadily as the cost for local services increases and as the needs for a growing population must be met. Government supported mortgage rates have advanced this year to $6\frac{1}{4}$ percent for an FHA loan (including the 0.5 percent insurance premium as paid by the borrower) and $5\frac{1}{4}$ percent for VA--the highest rates ever allowed in these programs. It is expected that the mortgage interest rates will show some additional increase by December 1959.

The average debt per home has also risen--from \$3,700, 10 years ago, to \$6,650 in 1959. This increase was partially the result of a larger portion of the home value being covered by loan in recent years (an average of 47 percent now as compared with 37 percent 10 years ago for all owned homes - newly bought as well as those bought earlier 2/). But there were also a number of other factors, with the most important being the large proportion that newly built homes were of all home purchases this year and the liberalization of mortgage terms. This liberalization took the form not only of lower down payments but also longer periods for repayment.

The average monthly housing payments for all purchases including houses just built and those previously occupied, have increased steadily each year since 1950, according to the records for FHA mortgaged homes. (These payments include amounts applied on principle, interest, taxes, and insurance.) The payments have, of course, been affected by increased purchase prices, changes in the ratio of the loan to the value of the dwelling, and by the length of time for repayment. 3/ However, while there has been an

1/ Monthly Labor Review, "Federal Loan Insurance and Housing Needs", by H. E. Riley, Vol. 82, No. 4 (April 1959), pp. 407.
2/ Federal Reserve Bulletin, September 1959, 1959 Survey of Consumer Finances, Housing of Nonfarm Families, pp. 1105.
3/ A report prepared by Federal Housing Administration, Division of Research and Statistics indicates these trends from 1956 to 1958 for home bought in each of the years shown.

	New Homes			Existing homes		
	1956	1957	1958	1956	1957	1958
Monthly Payments	\$82	\$90	\$96	\$79	\$86	\$90
Loan-value ratio	87	85	92	83	85	90
Term in years	26	26	27	22	22	24

increase in prices for houses, the payments still represent about the same proportion of income as they did several years ago (19.2 percent in 1956 and 20.4 percent in 1958).¹

There are, of course, certain characteristics of new homes that have improved along with the rise in prices. One of these improvements is in size. The average size of new single family homes insured by FHA, increased from 858 square feet in 1950 to more than 1000 in 1958. During the next year, it is probable that the size of homes will be about the same as this year. A greater amount of equipment is provided now than in earlier years.

All of these factors contributing to housing expense have been rising in recent years, including materials, labor, and land. One of the most significant is the increase in land values, particularly in the metropolitan areas where land for residential building is limited. The increase in land values is indicated by the 11.3 percent increase in two years - 1957 and 1958 - for purchases of "existing" FHA homes. ^{4/} Contrast this with the 3.3 percent increase in overall construction costs in the same two years as shown by Boeckh's index. ^{5/}

The 1960 prospect for prices point to some moderate increases. Building materials rises are expected to average in the neighborhood of 1 percent, higher property taxes will undoubtedly be put into effect in some localities, and other elements show little prospect of falling below 1959 levels. However, if builders cut average house size and some other quality factors, as happened to some extent in 1958 and 1959, the average cost for new homes may show little change from this year.

Housing supply

Since 1949, there have been more than a million units added to the housing supply each year. For 1959, estimates indicate that there will be more than 1.3 million housing units started, compared with 1.2 million in 1958. During the last few months, the rate of starts has been dropping and is expected to continue to show a declining trend to the end of the year. reflecting the mounting financing difficulties which began earlier in the year.

As you have heard at previous conferences, the supply of money for mortgages and the availability of low down payment financing have a significant effect on the rate of production and sale of new dwellings. The financial angle is one of the problems in the housing outlook at present. If interest rates continue upward in 1960, the number of dwelling units started could drop well below this years rate of about 1.3 million, but will probably be above last years total of 1.2 million units.

This sustained high building rate has not resulted in a large increase in vacancies. Vacant dwellings available both for rent and sale are still in the neighborhood of 3 percent of all units (as computed by the Bureau of Census), indicating continued strength in demand for both rental and home owner units. (See tables 1 and 2.) In addition to the small vacancy rates, other signs point to a very active housing market in the future. There has

^{4/} Op. cit., Federal Housing Administration.

^{5/} Residential Construction Cost Index for 20 Cities, E. H. Boeckh and Associates.

been an increase in the rate of household formation due in part to the high rate of employment and increases in income. More people can afford places of their own. This is particularly true of single people and elderly people. This increase in the number of households has been counterbalancing to some extent the declining marriage rate in recent years. But the marriage rate is expected (from population figures) to turn upward in the near future as new families are formed from the large number of children born during World War II. A further influence is the recent significant trend toward larger families, particularly in the moderate and higher income groups. These people, too, will support the housing demand.

Types of housing

There is a strong but recent swing toward greater emphasis on the construction of multi-family structures containing rental units. In metropolitan areas last year, 26 percent of all units constructed were of this type as compared to only 14 percent in 1956. (See table 3.) There has also been an increase in the proportion of units constructed in the city proper as compared to suburbs. Last year, 36 percent of all residential construction in metropolitan areas was in the cities proper as compared to 31 percent in 1956. 1960 will probably see some further rise in these proportions.

The increase in importance of the apartment type housing was probably due to a whole complex of factors --such as urban renewal programs, the low rate of construction of such housing for a relatively long period, and the demand by single people, elderly people, and small households.

The increase in proportion of new units located in the central city is, of course, directly related to the type of structure, but I cannot help but think of the traffic problem. With the growing congestion on roads and streets, suburban living tends to be less attractive for many families as travel within the urban area becomes more difficult and more costly.

Some of the prospective changes in materials used for residential construction are interesting. A marketing conference of 500 builders recently took a look ahead for the next 10 years, and heard predictions of the use of pre-finished wall panels, mechanically engineered to provide for heating, air-conditioning and lighting. They expect delivery of complete bathrooms to building sites, ready-to-connect kitchens, and greater use of plastics and metals in home components. Two companies are planning to manufacture foamed plastic panels with skins of plywood, hardboard, aluminum, stainless steel and other materials. Greater use of aluminum as a building material may be evident next year. The country's largest prefab manufacturer has recently bought out a number of its competitors, and prefabs may continue to account for a significant portion of homes next year. The company's plans call for new models in aluminum, factor finished in lucite acrylite paint. Pilot models of homes featuring porcelain enamel on steel are in the planning stage by a large steel company.

Household Equipment

When this conference was held last year, production and sales of the major household durables had dropped considerably below the peak levels of 1955 and 1956, although there were indications of strengthening in the latter part of the year. During 1958 retail prices of these products had been decreasing fairly consistently by small amounts.

Today, we find that the outlook for a higher level of production and sales in 1959 has been realized and the somewhat higher level of prices has also materialized. Thus, as of today, the general picture is of reversals of the downward drift in production, sales, and prices, with strong possibilities of continuation of these rises in the coming year.

Production and sales

Most industry spokesmen give strong backing to the belief that the recovery from the last recession has stimulated a rise in the sales of household durables which may approach the record levels set in those earlier years. Production and sales of furniture, appliances and other household durable goods have shown greater than expected increases from the low levels recorded in March 1958. By June 1959, the Federal Reserve Board's index of production of household durables had risen 35.6 percent. During this 15-month period, furniture production rose 32 percent, the output of major appliances increased by almost the same amount, and the production of radio and television sets showed an increase of nearly 68 percent.

Steel Strike

These optimistic expectations are currently clouded by the continued uncertainty regarding the eventual effects of the steel strike, the longest industry-wide steel walkout in history. The effects of the strike are two-fold. The first of these is the immediate effect on the producers of household goods who use steel as a primary raw material (such as, appliances, metal furniture, mattresses). Although nearly all of these firms had stockpiled steel equivalent to 60 to 90 days of normal use, many had begun to feel the pinch of low supplies by late September and in many cases had begun to cut back production schedules and furlough workers. As steel production is resumed, it will take from 4 to 12 weeks (estimates vary) to attain former "normal" levels of steel supply and inventories. Thus, a decline in the production of appliances and other durables made of steel parts is fairly certain during the final quarter of this year, and perhaps into early 1960. Most industry spokesmen feel, however, that the strike will put only a temporary damper on the current upturn and that 1960 will witness a continuation of the upward trend. The impact of the strike in the long run may be reflected in increases in prices of some appliances and other items of household equipment---if steel price increases are posted.

Review of Prices

In view of the prospect for higher prices for durable housefurnishings in 1960, I would like to review the retail price trend of the past few years.

Retail prices of housefurnishings (including textile housefurnishings) showed an average net decline of 3.6 percent between mid-1953 and June 1959. During the same period, the "all items" Consumer Price Index rose 8⁷/₇ percent. The post-Korean low for the housefurnishings index was 102.0 (1947-49-100) in January 1956. This was followed by a slowly rising price level during the remainder of 1956 and into 1957. By April of that year, the index was 105.1, or approximately 3 percent above the post-Korean low. From April 1957 to January 1959, the index showed a net decline of 1.8 percent; at which point the trend was reversed with retail prices increasing 0.8 percent by September 1959.

The overall decline in housefurnishings prices during the 6¹/₄ year period was caused primarily by lower prices for household appliances (excluding radio and television receivers) - a drop of almost 20 percent for the whole period. Record sales of appliances during 1955 and 1956 accompanied the high rate of new home construction and a greatly increased use of consumer credit. Prices of textile housefurnishings showed a 4.3 percent decrease during this period. The declines in the prices of appliances and household textiles were partially offset by substantial increases in the retail prices of floor coverings and housewares. However, in September 1959, retail prices of furniture and bedding were at about the same levels as in mid-1953.

The most significant factor in the steady decline in appliance prices was the effect of radical changes in retail merchandising. Discount houses which grew rapidly in number after the war made considerable inroads into the market and competition for sales became severe. In 1955, some manufacturers reluctantly began to drop fair trade pricing and other manufacturers followed suit during the next few years. Although price competition is still very much a part of the retail appliance picture, it has lost many of its less desirable "cutthroat" aspects, with the result that appliance prices have maintained a measure of relative stability during the past two years. Manufacturers and dealers have tended to concentrate increasingly on competing for the consumer dollar by means of new features and better service.

It appears that retail prices of housefurnishings have ended the declines that marked the first half of the decade, and there is now a strong possibility of a slightly upward trend amounting to perhaps as much as 2 to 2¹/₂ percent next year. Although competitive conditions for most items of household equipment will tend to put a damper on price increases, it appears unlikely that there will be full absorption of higher costs affecting the industry, especially at the producer level.

The prospects for the passage of a Federal Fair Trade Act during the next session of Congress are regarded in various quarters as ranging from "poor" to "good". The enactment of such legislation would, of course, put additional upward pressure on the retail prices of housefurnishings, affecting particularly the prices of housewares and small electrical appliances which are currently being sold at prices far below manufacturer's list.

Consumer Credit

The amount of money consumers are willing to borrow to finance the purchase of major items of household equipment also plays an important part in the outlook for sales of household durables. By all indications, more consumers than ever before are using credit to finance the purchases of furniture, appliances, television sets and other durables. According to data released by the Federal Reserve Board, installment credit (after slumping somewhat

during the recession) had risen to record levels by August 1959. The trend shows no sign of abating. If anything, during the past 18 months, credit of this sort has become easier to obtain. Banks in many sections of the country have gone into the small loan business in a big way, instituting so-called "revolving charge" plans. These plans authorize consumers to draw on a line of credit up to specified limits, with few limitations as to how or where the borrowed money is to be spent. The customer repays the balance at a set rate per month and is allowed to borrow additional amounts as his balance decreases. Higher interest rates may cause a slowing down of consumer borrowing, but it is doubtful that "tight" money, in itself, will have a depressing effect so long as consumer confidence remains at current high levels.

Product developments

As all of you know, it is often very difficult to keep completely current on the many changes or improvements in equipment that are constantly being made. But from what has been done in the last few years, and from such information as we have for the coming year, I expect that the changes we will see this next year will not be radical changes in present equipment or startlingly new products. They will most likely be alterations in the equipment now available, such as in the technical make up (changes which often cannot be seen without taking the article apart), in style or design, in the use of newer materials in place of the old, and in the addition of special features.

I also expect to see a continuation of the trend in recent years to "upgrading" purchases, that is, shifting purchases gradually up the quality scale so that yesterday's deluxe or luxury item is today's standard but by tomorrow is obsolete.

In the paragraphs that follow, I have elaborated in some detail a number of recent developments for specific housefurnishings (most of which will be familiar to you) and some of the changes that may be expected in the next one or two years.

Furniture

The demand of consumers for higher quality merchandise has had a considerable impact on the market for household furniture, according to retailer's statements. Until recently, the greater volume of both upholstered and case goods was in the low-to-medium priced or promotional lines. This year, the higher quality finishes and upholstery fabrics, better workmanship, and more expensive woods have accounted for a significantly larger share of sales.

Another occurrence in the furniture field has been the return to popular favor of dining room suites. Dining room furniture lost importance during and after World War II. In many cases, the purchase of furniture for the serving of food was, until recently, confined to dinette sets. In much of the housing of the past decade, people had room for little else, as the dining space had shrunk to a relatively small area between the living room and the kitchen. A large proportion of recently-constructed housing has made provision for normal-sized dining rooms and increased emphasis has been placed upon the styling and decoration of dining areas.

The styling of buffets and china cabinets, long-missing items in many households, has also changed. A buffet is still sold as a separate piece, but if a china cabinet is also desired, the buffet is used as the base and either a hutch-type (open face) or glass enclosed cabinet of matching style and finish is set on top of the buffet-base. It will be recalled that the old-style buffet and china cabinet were separate units, which could not be used together to make "one" piece.

New woods and finishes are being used extensively in the production of furniture. Chip wood cores are being used on all types of case goods to give firmer and better finish to the plywoods. Hardwood is being used primarily on the backs of cases, particularly in popular-priced furniture and on the backs of mirrors. Natural finishes, such as walnut and mahogany, have again become important, replacing the trend to the limed and bleached woods of a few years back. Plastic coatings are being employed on the tops of most case goods items, both high-priced and popular-priced, as a protection against staining and marring. Some producers have attempted to utilize molded plastic drawers, but the idea has not gained acceptance, since the dimensions of the cases must be uniform and the line held to one style if such mass-produced drawers are to be practical.

The use of foam cushions on upholstered furniture is becoming more widespread. Until recently latex rubber foam was utilized almost exclusively for this purpose. During the past year, however, improvements in a synthetic foam known as "urethane" foam have increased its wearing properties to such an extent that it is being widely used on medium and high quality pieces. Both types of foam are produced in soft, medium, and firm construction. Medium and firm grades are found primarily in better furniture while the softer foams are found mostly on low-priced and promotional items.

The styling of furniture has also changed. Modern furniture of today is approaching Swedish styling and features slimmer and softer lines. For the more traditionally minded, Early American styling has regained prominence during the past year, after being nearly off the market for several years due to the lack of consumer demand.

Floor coverings

Tufted floor coverings in man-made fibers have preempted much of the market formerly held by wool woven goods. The fibers currently enjoying widespread popularity are acrilan, nylon, and to a somewhat lesser extent, viscose carpet rayon. Carpets made of these new materials come in sizes ranging from scatter rugs to broadloom roll goods; in loop or cut piles and loop or cut designs, and in level or "high-low" designs. Latex backings are now used in all cases and most of these backings include scrim applied with the latex, giving additional body to the carpets. (The latex backings are used primarily for the purpose of holding in the stitches and to keep the rugs from slipping.)

In the category of hard-surface floor coverings, which were formerly linoleum and felt-base, tiles of various materials now have become important. First there were linoleum tiles, then asphalt, and later such materials as rubber and plastic. During the past year, newly developed rotogravure vinyl has shown a tremendous increase in popularity and is currently dominating sales in this market.

Appliances

The remarkable recovery of appliance sales from the recession lows of early 1958 to date is based primarily upon a strong upsurge in the demand for replacements. This is in sharp contrast to the record appliance sales in 1955 and 1956, when the demand for equipping new residential construction played a major role. The need for replacement is pointed up by an estimate that 50 percent or more of the "standard" major appliances (e.g., refrigerators, ranges) currently in use in American homes are 10 or more years old.

A related aspect of the sales increase involves "saturation", that is, the proportion of homes containing a specified appliance. The trade magazine, "Electrical Merchandising" listed the following estimates of saturation by item as of January 1, 1959. ^{1/} Refrigerators, 97.7 percent of all wired homes; electric washers, (all types), 90.9 percent; vacuum cleaners, 70.9 percent; radios, 96.3 percent; television sets, 89.0 percent; and electric toasters, 79.9 percent. These are considered to be "high-saturation" items. In contrast, electric and gas clothes dryers were to be found in 15.9 percent of all wired homes; dishwashers, in 5.8 percent; and food waste disposers, in only 8.5 percent.

With these data in mind, manufacturers are directing their sales and promotion efforts to three basic markets: (1) The replacement of existing appliances with new models having greater style appeal and with some improvements in operational characteristics; (2) The promotion of "second" purchases of appliances already owned, such as radios and television sets, and (3) The addition of new items such as dryers, and food waste disposers.

The primary result of the renewed interest in replacement appliances has been a noticeable upgrading in the quality offered to and demanded by consumers. More and more fixtures, formerly found only on the most expensive and deluxe models are becoming standard equipment on the volume selling appliances. This year, manufacturers expect about half of the sales of household refrigeration equipment to be refrigerator-freezer combinations. In many cases, conventional refrigerators are being replaced with refrigerator-freezer combinations of much greater capacity and include, among other things, a true freezer compartment and completely automatic defrosting. The two-door top-freezer unit in 12.0 to 13.5 cubic foot range, with a frozen food capacity of 85-100 pounds, is currently the most popular item of this type. It is possible that the next few years will see the refrigerator-freezer become a standard item in a significant portion of urban homes. Conventional refrigerators will, however, continue to retain a sizeable share of the market, especially in rural areas, where home freezers are popular. Upright freezers of larger capacities have replaced chest-type freezers as the volume seller. Conventional refrigerator models will soon include as standard equipment fully automatic defrosting, slide-out or swing-out shelves, larger crispers and frozen food compartments. Slim and square styling has been featured in all lines during the past several years, making them more attractive and modern in appearance, and allowing the use of larger capacity boxes in limited spaces.

^{1/} Published by McGraw-Hill Publishing Company, New York, January 1959, pp. 59.

Air conditioners of greatly increased cooling capacity and requiring less expensive installation are being introduced. Cooling capacities are given in British Thermal Units (BTU's), thus permitting a more uniform standard of comparison than was possible under the old "ton" and "horsepower" ratings, which were in themselves meaningless. The cooling capacities have been increased while the size of the new models have been reduced. Models which run on the standard 115-120 volt house current are now widely available, and many standard models now include provision for the exhaust air as well as intake or recirculation. The most significant recent development in the air conditioner field is the "heat pump." Models with this pump can be used in cold weather to heat, and circulate air as well as cool it in summer, through a reversal of the normal refrigeration process.

Laundry equipment has undergone remarkable changes in the last several years. The wringer washer has declined in importance during the past decade, although it still accounts for about 20 percent of total washers sold. Automatic washers with two or more washing and spin speeds are currently the most popular. The more deluxe models are featuring more automatic controls, permitting the user to select any combination of washing cycle time, agitator speeds, and water temperatures with the touch of a button or the turn of a dial. One of the latest developments in washer features is a dispenser which automatically adds bleaching agents to the wash water in the correct amounts and at the correct time in the washing cycle. Automatic dryers, the "growth" appliance of the home laundry industry, are designed to be sold in matching pairs with washers and have been developed along much the same lines. Drying times, temperatures, and combinations of the two may be selected according to the type of wash to be dried. Several new dryer models are being produced with built-in moisture condensers, thus eliminating the need for outside venting. Combination washer-dryers have been on the market for several years, but mechanical difficulties and high purchase costs have held the sales of these appliances to 3 to 4 percent of the market during this period.

Increased automation in cooking has highlighted the advances in gas and electric ranges. Electric ranges in nearly all price categories now have ovens which are started and turned off by simple clock settings, which until recently were found only on the higher-priced models. The manufacturers of both gas and electric models are emphasizing rotisseries, barbeque attachments and other such specialized equipment. In addition, features such as warming drawers, double ovens, thermostatic burners, and waisthigh broilers are coming into more widespread use. Most gas range models are now equipped with automatic ("matchless") oven lighting and oversize simmer burners. Many of the popular-priced models also have oven windows and griddles, which are convertible to 5th burners. Built-in range tops and wall ovens have increased tremendously in popularity during the past five years to the point where they are now an important factor in the market, particularly in new housing. Consumer preference for smaller ranges has become evident during the past year. The 30-inch wide electric range is now more popular than the formerly predominant 40-inch size. The 30-inch gas range has shown sizeable sales increases although the 36-inch width is still the most popular.

Vacuum cleaner design has changed considerably during the past decade. During this period, the upright cleaner was replaced by the tank type cleaner, and it in turn was superseded by the canister-type. The canister cleaner is less expensive, lighter in weight, and capable of performing as many tasks as its predecessors. However, it has one serious limitation when compared to

the upright. It lacks the power and the equipment to clean rugs and carpets as well. To overcome this deficiency, some manufacturers have increased motor capacities from $3/4$ to $1\frac{1}{4}$ horsepower, to provide more suction and cleaning power. Power-driven rug cleaning tools with revolving brushes are also being produced for use with the highest priced models.

The domestic production of sewing machines has fallen off greatly during the past few years, as lower-priced imported machines, particularly those from Japan, have taken the greatest share of the market. At present, there is only one American company producing sewing machines for the domestic market. While the conventional "straight-stitch" machines are still sold in largest volume, the more deluxe "zig-zag" machines, capable of doing a greater variety of work, are increasing in popularity.

Small household appliances are unique in the household equipment field in that they are not, for the most part, subject to yearly model changes. For example, one popular toaster was on the market for six years with no change in make up. Similarly, most of the "standard" small appliances (e.g., toasters, steam-and-dry irons, electric percolators) have undergone relatively few major changes during the past several years. Deluxe toaster models which are fully automatic and steam irons which direct a fine spray of water on fabrics while they are being ironed have been marketed by several manufacturers, but they have not displaced the more conventional types. Thus while there has been some emphasis on the basic product development of standard items, more attention has been given to swelling the number of new housewares items, such as electric can openers, hot dog cookers, and egg poachers.

In the television field, the 17-inch "portable" set, which can be carried from room to room, is now one of the best sellers. This set is being promoted vigorously as a second set for households that already have a standard 21-inch console or table models. Color television sales have increased substantially during the past few years, but the high cost of these sets and the costs for repairs precluded their widespread sale.

Transistor portable radios have become extremely popular during the past year. These compact models can be operated on small flashlight batteries. Low-cost Japanese portables have made considerable inroads into the domestic market and some American producers are marketing these radios under their own labels or using Japanese transistors in the manufacture of their own sets.

I would like to mention briefly two of the smaller housewares. Since World War II, the domestic dinnerware industry has increasingly felt the impact of imported semi-vitreous and vitreous dinnerware. In addition, domestically-produced plastic dinnerware has gained a sizeable share of the market formerly held by semi-vitreous china. During the past few years, stainless steel table flatware has gained in importance and may eventually replace silver plate to a large extent. Many domestic producers are engaged in the manufacture of stainless steel flatware, but Japanese imports currently constitute the greatest source of domestic supply.

Experimental products

Up to this point, I have reviewed some of the developments in the household appliance field and have indicated those that have gained or are currently

gaining consumer acceptance. I would now like to list some of the products that are now in the developmental stage and may not appear on the market for several years. Several manufacturers are currently experimenting with refrigeration and heating equipment using thermocouples as the source of cooling and heating. This is based on the principle that an electric current passed through a coil made of dissimilar metals or metal alloys, produces cooling or heating at the point where the metals are joined, depending on the direction of the current flow. The advantage of this method lies in the elimination of compressors and other bulky mechanical equipment, reducing the size of the apparatus and the need for repairs and service. Also in the developmental stage are washers which are said to have the capability of cleaning by means of high-frequency sound waves. Cooking by infra-red rays has also been developed. Ovens equipped with infra-red devices allow the user to cook roasts and other such foods in a matter of minutes rather than a period of several hours. Such ranges are now being produced and marketed in very limited numbers.

* * *

As a final word in this discussion of housing and household equipment, I would like to introduce a touch of nostalgia. In these conferences, your attention is directed to developments in recent years, particularly as they affect the outlook for the coming year. While this main purpose must be served, it is well to take a backward look occasionally. For this purpose, I would like to commend to you, two chapters from a recent book 1/ issued by the U. S. Department of Labor that describes changes in living conditions and improvements in our standard of living since the turn of the century. These two chapters are titled "From Slums to Suburbia" and "The Homemaker's Job and the Home Scene." They give a long time perspective of the cumulative effect of the gradual changes that have occurred in our homes and in the kinds of equipment in most of our homes today.

1/ How American Buying Habits Change, U. S. Department of Labor.

OUTLOOK FOR HOUSING, AND EQUIPMENT IN 1960

by
Mrs. Ethel Hoover, U. S. Department of Labor
before the
Agricultural Outlook Conference
Washington, D. C., November 17, 1959

Table 1 - U. S. Tenure Ratios
for Selected Years

Year	Percent of all dwelling units				
	Owners	Renters	Vacancies		Other
			Available for sale	Available for rent	
1940	40.7	52.7	(1/)	(1/)	(1/)
1950	51.2	41.9	0.5	1.1	5.3
1956	55.3	36.4	0.5	2.1	5.7
1957	55.8	35.7	0.5	1.9	6.1
1958	54.9	35.8	0.6	2.2	6.5
1959 <u>2/</u>	55.2	35.0	0.6	2.4	6.8

1/ Not available in comparable terms.

2/ Average for first 2 quarters.

Source: 1940--Census of Housing, 1940, Vol. I, Part I, Table 10.

1950--Census of Housing, 1950, Vol. I, Part I, Table 2.

1956-1959--Housing and Construction Reports, Series H-111,
Nos. 4 thru 17.

Table 2 Distribution of Vacant Dwelling Units
Available for Occupancy 1/

	United States		Metropolitan areas	
	For rent	For sale	For rent	For sale
<u>1958</u>				
Third quarter	2.2	0.6	2.0	0.5
Fourth quarter	2.3	0.6	2.0	0.4
<u>1959</u>				
First quarter	2.3	0.6	1.9	0.5
Second quarter	2.5	0.7	2.1	0.6
Third quarter	2.4	0.6	2.1	0.6

1/ Bureau of the Census, Vacant Dwelling Units of the United States, Series H-111, No. 15 (October 1958 and January 1959) and No. 16 (April and July 1959).

Table 3 - Distribution of New Privately Owned Dwelling Units
Authorized by Building Permits,
1956 to July 1959 1/

	Percent of total new dwelling units			
	1956	1957	1958	1959 (Jan. to July)
United States	100	100	100	100
1-family	98	82	78	76
Multifamily	12	18	22	24
Metropolitan area	100	100	100	100
Location				
Central city	31	34	36	<u>2/36</u>
Suburbs	69	66	64	<u>2/64</u>
Type				
1-family	86	79	74	72
Multifamily	14	21	26	28
Central cities <u>3/</u>	100	100	100	100
1-family	71	65	60	<u>2/55</u>
Multifamily	28	35	40	<u>2/45</u>
Suburbs <u>3/</u>	100	100	100	100
1-family	92	86	82	<u>2/80</u>
Multifamily	8	14	18	<u>2/20</u>

1/ Trends in Building Permit Activity, U. S. Dept. of Labor, Bulletin No. 1243.

2/ Includes public housing.

3/ Of metropolitan areas.

Table 4 - INDEXES OF CONSUMER DURABLE GOODS OUTPUT

(1947-49 = 100)

Year	Total	<u>Major household goods</u>		
		Furniture and floor coverings	Appliances and heaters	Radio and tele- vision sets
1950	143	120	132	243
1951	118	104	112	178
1952	115	109	99	184
1953	132	113	118	230
1954	122	101	111	214
1955	145	116	139	249
1956	144	117	143	224
1957	132	114	127	224
1958	127	115	127	166
1959	150	137	146	201

(7 months)

SOURCE: Data published by the Board of Governors of the Federal Reserve System

Table 5 - Proportion of Wired Homes Having Specific Appliances, 1939 to 1959
(On January 1 of year indicated)

Year	Electric Refriger- ator	Electric Washer 1/	Toaster	Tele- vision	Food Freezer	Clothes Dryer	Room Air Con- ditioner
1939	51.5	57.3	54.4	2/	2/	2/	2/
1949	76.6	67.4	64.5	2.9	4.0	0.5	2/
1950 3/	82.0	69.7	66.9	14.7	5.6	0.9	0.2
1951	86.4	71.9	69.3	26.4	7.2	1.2	0.5
1952	86.7	73.5	70.5	35.5	9.8	2.2	0.8
1953	89.2	76.2	70.9	46.7	11.5	3.6	1.3
1954	90.4	78.5	71.9	63.1	13.7	5.0	3.2
1955	92.4	81.3	73.2	74.1	15.1	6.6	4.5
1956	94.1	84.1	74.8	76.1	16.8	9.2	5.6
1957	96.0	86.8	77.1	81.0	18.0	11.9	7.6
1958	97.3	88.5	77.8	86.0	19.2	13.7	9.6
1959	97.7	90.9	79.9	89.0	21.0	15.6	11.7

1/ Not available, 1950 data estimated by extrapolation.

2/ Includes both automatic and wringer types.

3/ Not available, insufficient quantities on the market.

SOURCE: McGraw-Hill Publishing Company; "Electrical Merchandising" Magazine. Data represents percent of wired homes with these appliances.

Table 6 - Consumer Price Indexes for Selected Housefurnishings
Bureau of Labor Statistics (1947-49=100)

	INDEXES			PERCENT CHANGE	
	1953	1956	Sept. 1959	1953- 1956	1956- Sept. 1959
<u>Housefurnishings</u>	107.9	103.0	104.0	- 4.5	+ 1.0
<u>Rugs</u>					
Rugs, wool Axminster	142.0	147.2	151.7	+ 3.7	+ 3.1
Carpets, wool Broadloom	117.4	118.8	128.5	+ 1.2	+ 8.2
Rugs, felt base	108.7	121.2	125.7	+11.5	+ 3.7
Carpets, rayon broadloom <u>1/</u>	97.6	96.5	87.6	- 1.1	- 9.2
<u>All Furniture and Bedding</u>	<u>109.7</u>	<u>107.6</u>	<u>110.0</u>	<u>- 1.9</u>	<u>+ 2.2</u>
Living room suites	108.0	110.3	112.8	+ 2.1	+ 2.3
Dinette sets	103.9	101.8	110.4	- 2.0	+ 8.4
Bedroom suites	111.2	102.2	97.9	- 8.1	- 4.2
Sofa beds	110.2	112.7	115.7	+ 2.3	+ 2.7
Mattresses	112.4	112.9	120.3	+ 0.4	+ 6.6
<u>Appliances <u>2/</u></u>	<u>97.0</u>	<u>84.1</u>	<u>83.1</u>	<u>-13.3</u>	<u>- 1.2</u>
Sewing Machines	115.8	112.1	116.5	- 3.2	+ 3.9
Washing machines	105.9	98.2	95.4	- 7.3	- 2.9
Vacuum cleaners	111.5	96.7	83.1	-13.3	-14.1
Refrigerators, electric	96.5	72.9	64.3	-24.5	-11.8
Cook stoves	106.6	101.9	103.2	- 4.4	+ 1.3
Toasters <u>1/</u>	101.0	78.6	73.7	-22.2	- 6.2
Radios <u>1/</u> <u>3/</u>	99.2	88.7	86.5	-10.6	- 2.5
Television sets <u>1/</u> <u>3/</u>	97.9	86.6	94.1	-11.5	+ 8.7
<u>Textile Housefurnishings <u>1/</u></u>	<u>98.7</u>	<u>94.5</u>	<u>94.4</u>	<u>- 4.3</u>	<u>- 0.1</u>

SOURCE: U. S. Department of Labor, Bureau of Labor Statistics

1/ December 1952 = 100

2/ Includes sewing machines, washers, vacuum cleaners, refrigerators, ranges, toasters, radios, and television sets.

3/ Not included in housefurnishings index.

THE OUTLOOK FOR MARKETING MARGINS AND COSTS

Talk by Willard F. Williams, Marketing Economics Research Division
at the 37th Annual Agricultural Outlook Conference, Washington, D. C.
9:15 a.m., Wednesday, November 18, 1959

Retail prices of farm foods dropped nearly 3 percent in 1959, compared with the average level in 1958. This is the first reduction in annual average retail food prices since 1954, and compares with an average annual increase of 3.3 percent in the period 1954-58. The retail store cost of foods in the AMS market basket averaged \$1,065 in 1958, a 6-percent increase from 1957. The retail-store cost of market basket represents the value of the average quantity of food purchased annually in retail food stores by an urban family. Our preliminary estimate indicates a drop in this retail cost of about \$30 to \$1,035 in 1959.

Let's take a look at a chart that includes retail prices (fig. 1). Here we see that the Consumer Price Index, the Bureau of Labor Statistics index of prices paid by consumers for all of the products and services they buy, remained about unchanged in 1952-55 while retail prices of food were dropping. The CPI increased sharply after 1955, leveled off in 1958, and has remained relatively stable in 1959. Although retail food prices have risen in recent years, they have remained low since 1955 relative to retail prices of other consumer items and have dropped gradually since about mid 1958.

The chart also shows the market basket farm value. This is the payment to farmers for quantities of farm produce equivalent to the quantities consumed annually by an average urban consumer family.

Retail prices of food apparently are affected by what happens to farm prices of the raw material. The market basket farm value dropped steadily during 1951 through 1955 and this decline was primarily responsible for the drop in retail food prices that took place after 1952. The subsequent rise in farm and retail prices of food peaked early in 1958. At its highest point in March last year the farm value still was below the 1947-49 average. The decline since March 1958 was broken only by the small seasonal rise early this year.

A drop of \$32 in 1959 from 1958 in the farm value of the consumers' market basket of food was only slightly larger than the reduction in retail cost. However, this represented a 7.5-percent decline in farm value compared with the 3-percent drop in retail cost mentioned earlier. The market basket farm value averaged \$395 in 1959, the same as in 1955.

We are not always certain of the direction of cause and effect when considering related changes in farm and retail prices. Sometimes changes in retail prices seem to cause changes in farmers' prices. Much of the drop in retail prices during the last year, however, apparently was caused by sharp

reduction in farm prices of hogs, eggs, and frying chickens, but farm values were lower in the third quarter this year as compared with the same quarter last year for all product groups in the market basket except dairy products and fruits and vegetables.

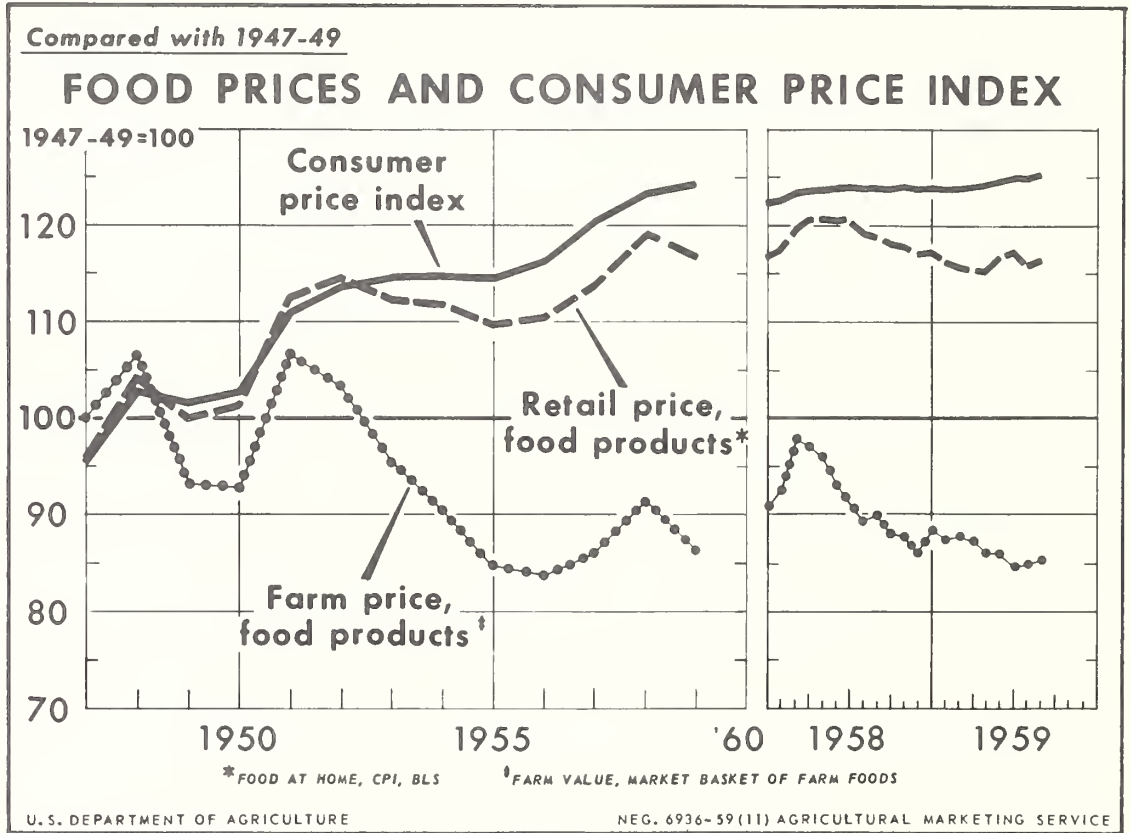


Figure 1

What about marketing margins or price spreads on food? These also can be analyzed by using the Department's market basket statistics. The marketing margin is the difference between retail cost and farm value as these were defined earlier. It measures the per unit charges made by marketing agencies for the services associated with a fixed market basket of farm foods bought by consumers in retail stores and includes both cost and profits of marketing agencies. Market basket retail cost, farm value, and margin data are computed on many individual commodities, for commodity groups, and the entire market basket of foods. The product produced by marketing firms is not food but services and the price received by these firms for services is the gross marketing margin or price spread. These two terms, marketing margin and price spread, are used interchangeably.

Trends and Changes in Marketing Margins

The total marketing margin of the food in the market basket has increased steadily and substantially in the present decade (fig. 2). It has increased 31 percent since 1950 and more than twice this much since the end of World War II. In the last year, however, the market basket farm-retail price spread increased relatively little, from \$638 to \$640, because the retail cost dropped nearly as much as the farm value. But this small increase in the spread in the face of a drop in farm prices has caused a further decline in the farmer's share to 38 percent. This is the lowest level for the farmer's share since 1939 and compares with a peak of 53 percent in 1945 (fig. 2).

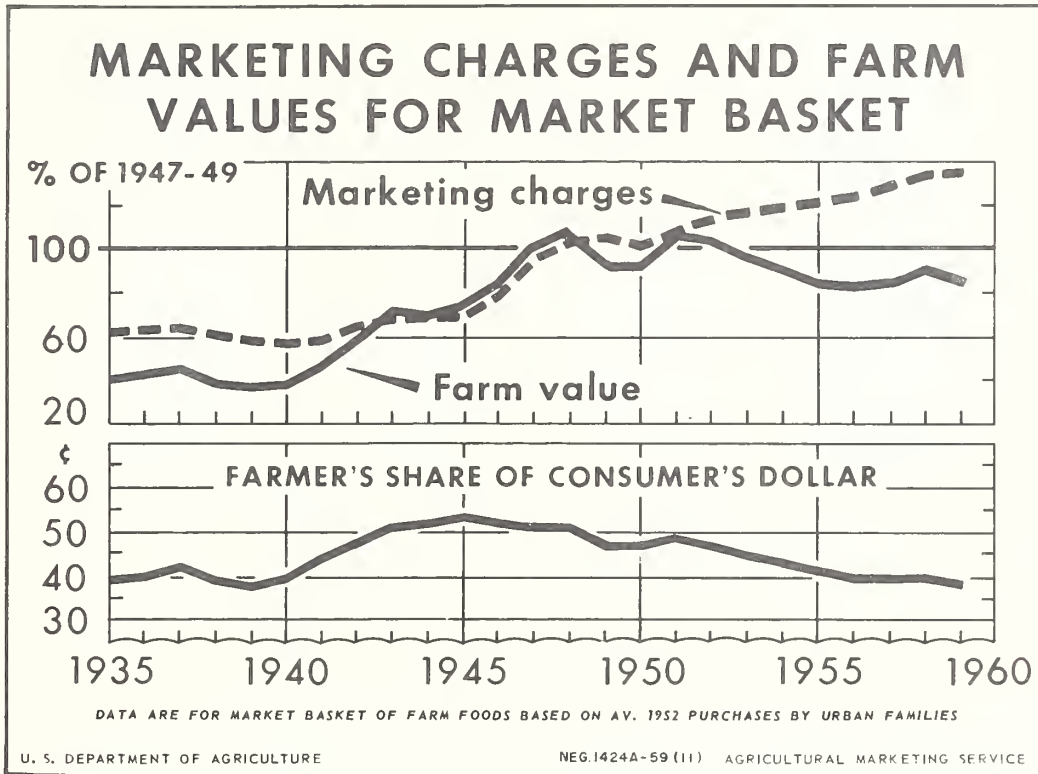


Figure 2

Most of the widening in farm-retail price spreads in the last 15 years came during three periods of marked general price inflation. The first followed World War II, the second was during the Korean conflict in 1950-52, and the third was in the period 1955 to 1958. From 1952 to 1957 the marketing margin rose an average of 1 or 2 percent per year. Over the entire period since 1950, however, the average annual increase has been nearly 3.5 percent.

Farm-retail price spreads on margins have increased substantially for all principal groups of farm foods except poultry and eggs (fig. 3). The marketing margin has increased most since 1947-49 for red meat products and bakery

and cereal products, but, as indicated, increases for fruits and vegetables and dairy products also were large. Figure 3 also shows how these increases have affected the total market basket farm-retail price spread. This spread averaged \$474 in 1947-49, but a drop of \$71 in the farm value and a rise of \$95 in the retail cost increased the spread \$166, to a total of \$640 in 1959.

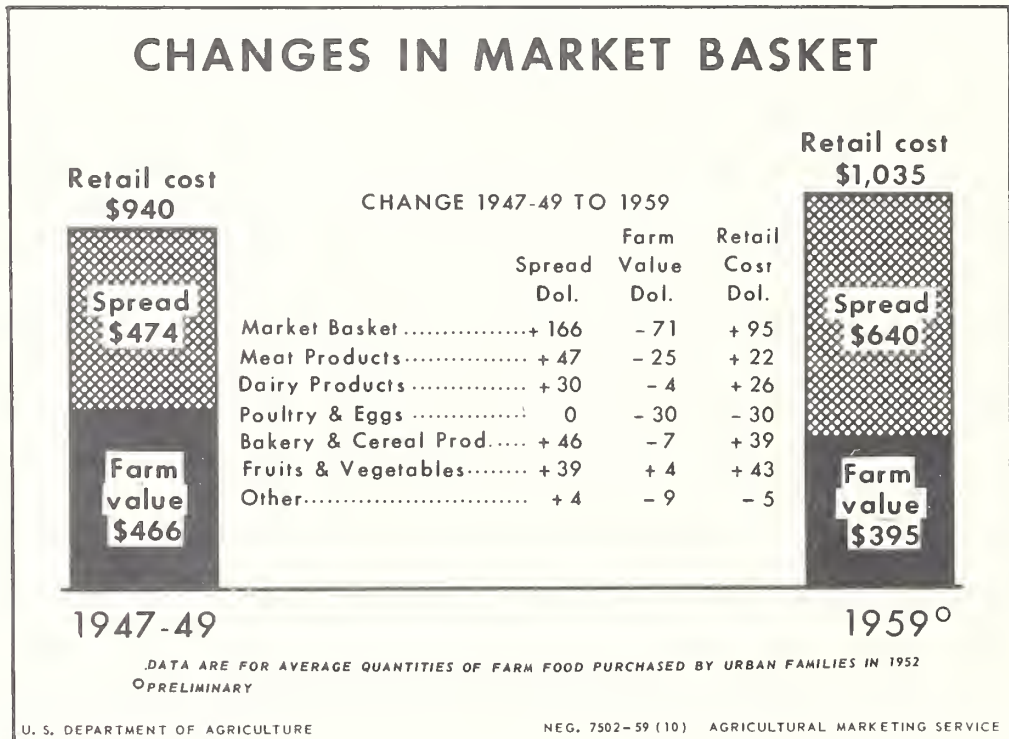


Figure 3

Consider the poultry and egg group for a moment. Note that the farm-retail spread for this group was the same in 1959 as in 1947-49. The farm value, however, has dropped \$30, or 37 percent. With no change in the marketing margin the entire effect of this change was reflected through to the retail level in prices paid by consumers. This was made possible by a more efficient organization of the marketing system for poultry and eggs and improved methods of distribution.

Reasons for the Increases in Food Marketing Spreads

Higher costs of performing marketing operations were principally responsible for the widening farm-retail price spreads. Figure 4 shows that (for the selected periods indicated) cost factors, unit labor costs, rail freight rates, and other costs of marketing firms changed in the same manner and in

about the same magnitude as the marketing spread. New or added marketing services and other factors, however, also were partly responsible for the rising margins.

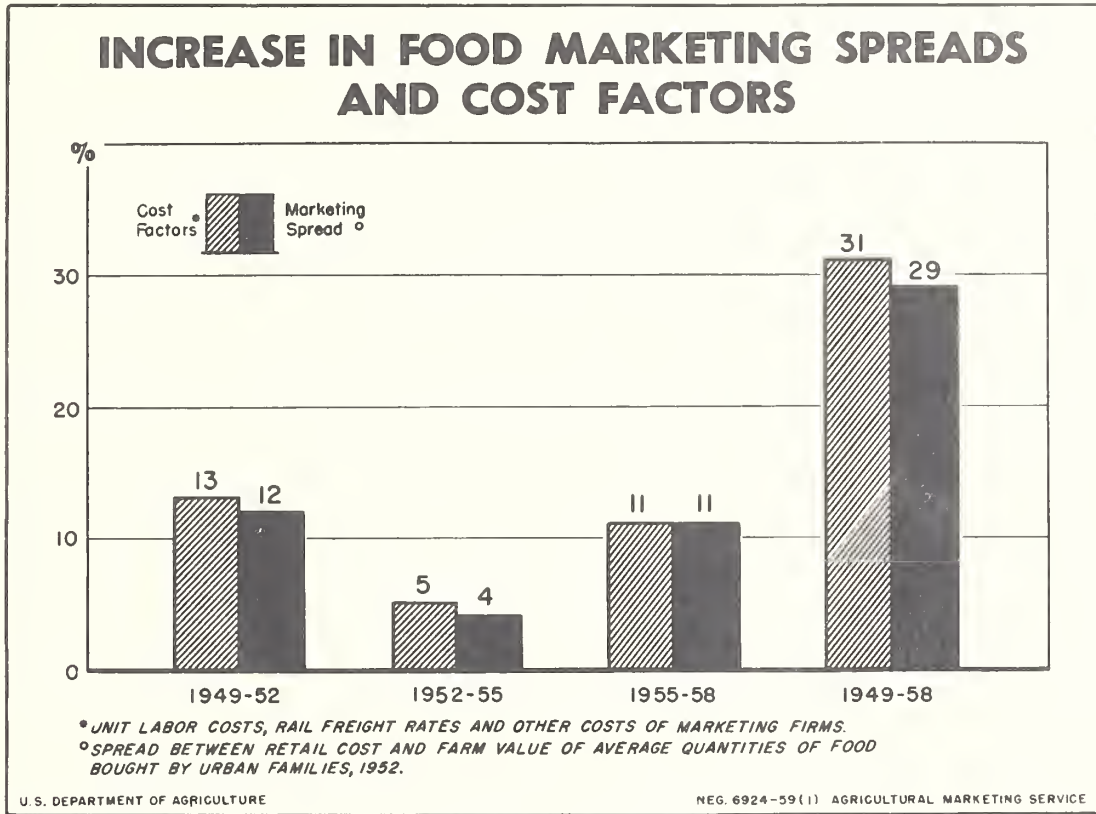


Figure 4

Costs and Profits

The labor bill of most food marketing firms accounts for about half of their gross margins. In addition, prices of materials and services bought by marketing firms--containers, equipment, fuel, and even advertising--are greatly influenced by labor costs. Trends in hourly earnings of food marketing employees and in unit marketing charges are similar. Hourly earnings have increased 69 percent since 1947-49 and 53 percent since 1950. Labor costs per unit of product marketed, however, have increased only about 25 percent since 1950, indicating that the food marketing system has become considerably more efficient in the use of labor.

Substantial increases in transportation rates also have tended to widen marketing margins on agricultural products. Higher transportation costs, of course, are not unrelated to the general rise in labor costs. Other factors that probably have contributed to higher unit marketing charges are taxes, fees and licenses of all kinds, costs of containers and packaging materials,

interest, and most other costs. Profits of food marketing firms apparently have not been a major factor in widening price spreads in the last decade. Nevertheless, profits of food marketing firms have increased substantially. In relation to dollar sales of leading food marketing firms they have trended upward since about 1951.

Added Marketing Services

New or added marketing services--built-in maid services particularly--often are cited as a principal factor tending to increase marketing costs and margins. But additional marketing services do not always increase marketing costs. We have much to learn about the effects of added marketing services on gross margins and on prices that consumers pay for food. Additional information should result from research now under way.

It appears to us, at present, that added marketing services probably have not affected marketing margins and consumer prices as much as has been generally assumed. Their effect may have been relatively minor.

Why is this? It would seem from casual observation that added services associated with food retailing, such as larger parking lot facilities, larger and more elaborately decorated stores, expensive cases and facilities, music and air conditioning, check cashing and baby tending services, etc., must have increased marketing costs substantially. It would seem also that built-in services, such as TV dinners; ready-to-cook broilers; prepared mixes; washed, waxed, and prepackaged fruits and vegetables; citrus concentrates; chicken pot-pies; and the many other "convenience" foods must have had a significant effect on marketing costs and charges.

Many of these added services, of course, have increased marketing costs. But when we take a look at the total marketing bill for food, that is, the margin per unit we have been discussing up to this point multiplied by all of the food units moving through the marketing system, we find that it has increased \$28 billion, from \$9 billion in 1940 to \$38 billion in 1959. But we find that nearly all of this increase is accounted for by two factors separately and by the combined effect of the two. These are the rising price level, or inflation, and the greatly increased volume of food that is marketed to feed our growing population. This means that new or added marketing services have been of minor importance, that the effects of these services on unit costs have been largely offset by increases in marketing efficiency, or both. The costs of parking lots and the many other services offered by supermarkets today have been largely offset in their effects on unit costs by economies of scale or large volume, self services, and by more efficient physical handling of food products in stores and warehouses. Added processing and packaging of many products are at least partly offset by reductions in waste and spoilage, savings in transportation and storage, new technology in processing and distribution, and by converting products into forms that are uniform in size, shape, and quality and, therefore, suitable for mass merchandising. Furthermore, the modern housewife is still price conscious to the extent that the convenience foods that give her the best bargains are the ones that have set the

best sales records. Many of the frozen fruits, vegetables, and juices as well as cake mixes, and cut-up, ready-to-cook chicken are examples of these "low cost" processed foods with high sales volume.

Let us illustrate some of the things I have been talking about by considering orange juice (fig. 5). Here we have compared retail costs, marketing margins, and grower returns on 24 ounces of single strength juice from oranges marketed in fresh, canned, and frozen concentrate form. The comparisons are made for juice consumed in New York in two different years. We see that the retail cost to consumers was highest on 24 ounces of juice from fresh oranges while grower returns were about the same for juice in each form. Retail costs as well as marketing margins were considerably lower for juice obtained from the canned and frozen concentrate products. But both the canned and concentrate juice receive more processing than do fresh oranges. The concentrate, in turn, is more highly processed than canned juice and requires cold storage. In searching for an explanation we see that, in truth, per unit packing costs on fresh oranges are smaller than processing costs on equivalent quantities of juice in canned or concentrate form. But transportation costs and wholesaling costs are considerably smaller on the processed products, particularly on

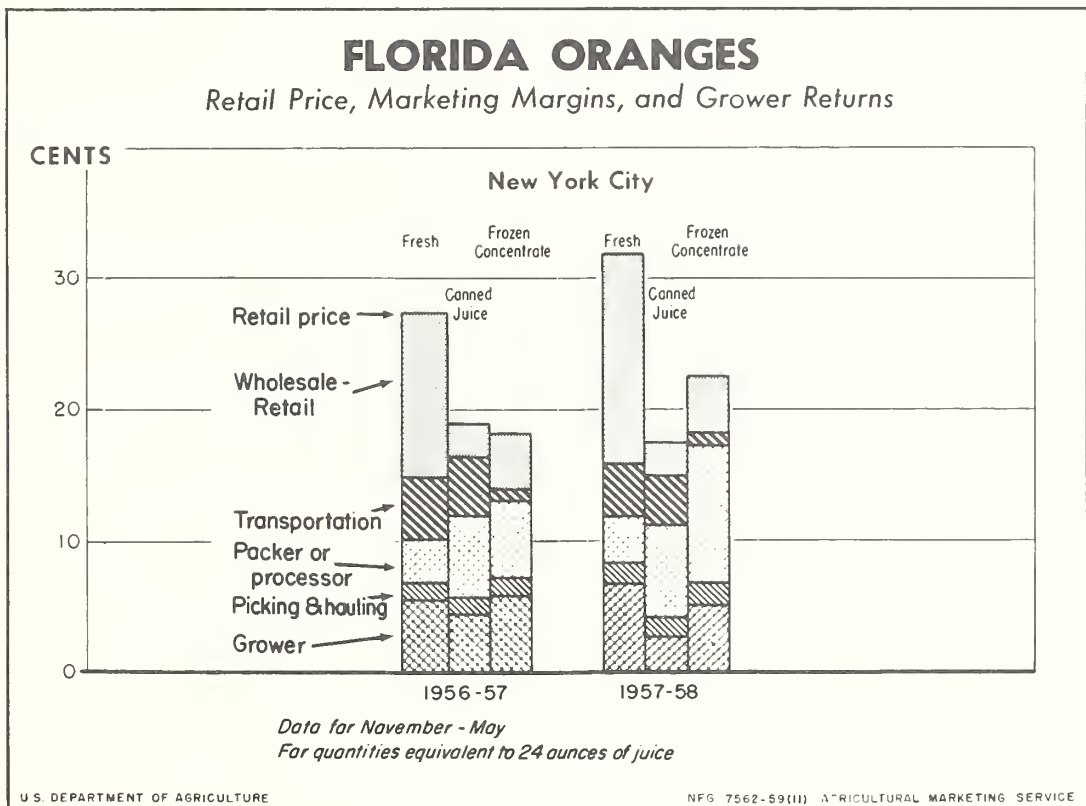


Figure 5

frozen concentrate. Despite the higher per units costs of processing, total per unit marketing charges were smallest in 1956-57 for frozen concentrate. This, of course, is a special case. We cannot expect to find lower retail prices and marketing margins on all convenience foods as compared with their less convenient counterparts. Lower prices for convenience foods, however, may be more prevalent than is generally assumed. Our research, we hope, will tell us more about the conditions under which we can expect to find that the convenience product is the most economical.

Effects of Marketing Costs on Prices

Effects of changes in marketing costs on retail prices differ sharply, depending on the length of time under consideration, the nature of the commodity, and other factors. From week to week, from month to month, and even season to season, in some cases, changes in costs of labor or other factors and changes in costs due to increased efficiency or the addition of new services may have little, if any, bearing on or relation to changes in either farm or retail prices. If marketing firms adhered closely to a cost-plus pricing policy, there would be a closer relation between short-term changes in marketing costs and prices. But they do not. Food prices still are established largely through the operation of the supply-demand principle. But over longer periods of time costs affect supply and, therefore, they also affect prices. Over time, sharply rising unit marketing costs must be reflected in higher prices to consumers, lower prices to producers, or both. Even so, the effect differs, depending on the commodity.

Consider a commodity, such as eggs (fig. 6), which requires relatively little processing. The proportion of the retail price of eggs accounted for by marketing services is small compared to the proportion accounted for by producer services. This is to say that the farmers' share is large and the marketers' share is small. Note that the marketing margin changes little over time and that variations in the farm value of eggs are closely paralleled by changes in the retail value of this commodity. Retail prices in this instance are influenced most by farm prices for two reasons. First, the farm value is large in relation to the gross marketing margin. Second, the farm value varies considerably more over time than does the marketing margin.

Now consider another commodity--bread (fig. 7). Although the cost of flour to the baker represents a relatively high percentage of the total ingredient cost of bread, flour and wheat represent only a small proportion of the average retail price of a pound loaf of bread. The farmer's share of the retail price of bread is low and the marketer's share is large. Most of the retail price of bread goes to pay for services rendered in milling the flour, and in baking, wholesaling, and retailing the bread either through stores or delivery routes. In the third quarter, 1959, the retail cost of a pound loaf of white bread was 19.7 cents. The marketing margin was 16.9 cents and the farm value was 2.8 cents, or only about 14 percent of the retail price. The close correspondence between retail prices and the marketing margin is obvious.

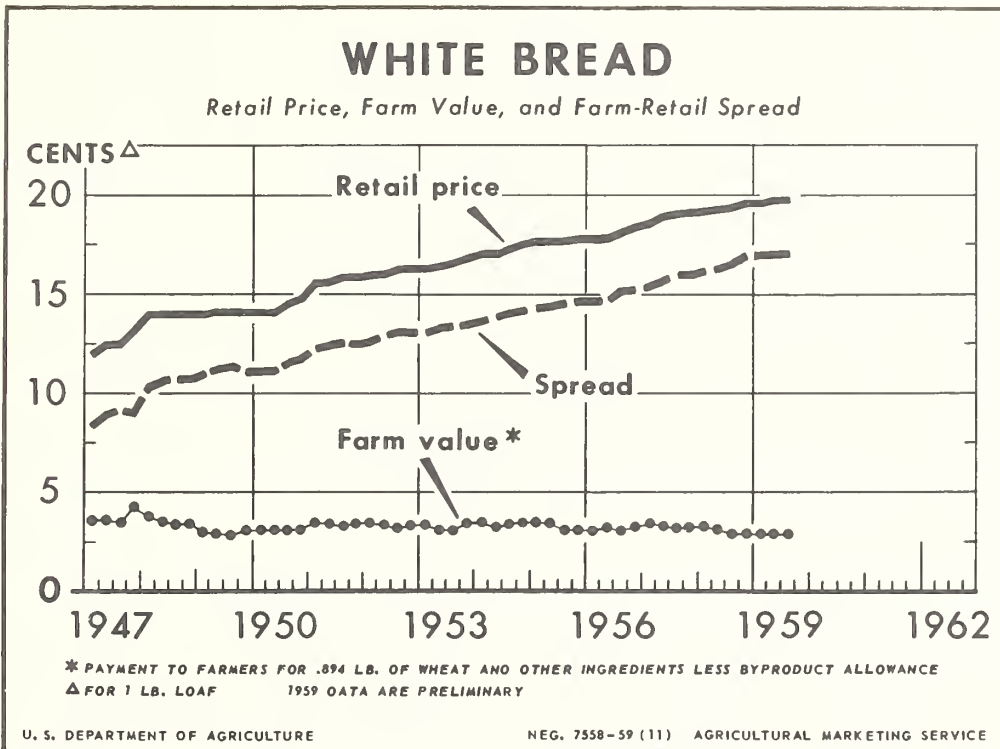


Figure 6

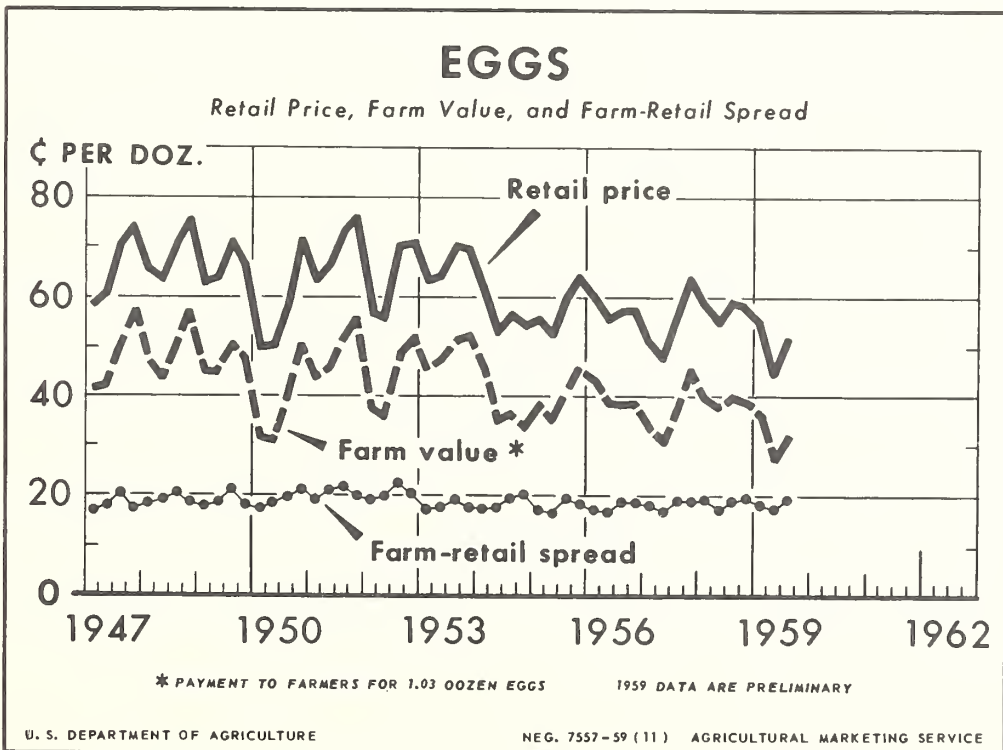


Figure 7

Both have trended sharply upward while the farm value has sloped gently downward. Magnitudes of variation from quarter to quarter in the margin and in the farm value for bread have been about the same. Some of the short-term charges in the farm value, however, were reflected through to the retail value.

Most other farm food products fall somewhere between the extremes illustrated by eggs and bread. For some, the farmer's share is large, but the variations in the marketer's share are so great that they, nevertheless, are clearly reflected in retail prices. For others, the marketing margin is the largest component of the retail price, but larger farm price variations affect retail prices. The point is that in analyzing retail prices the effects of each must be considered.

Another important observation that can be made by comparing the charts on eggs and bread concerns the farmer's share. The farmer's share of the consumer's dollar spent for commodities such as eggs or broilers is high. The farmer's share for highly processed commodities, such as bread or canned vegetables, is relatively low. This does not mean, however, that egg and broiler producers earn larger profits or are in an economically superior position to wheat producers or producers of vegetables for processing. We are all well advised, therefore, to use the farmer's share figures with considerable care in explaining production or marketing problems.

The Outlook

Our commodity experts tell us that farm prices of all major groups of food products except perhaps milk and butterfat and some poultry products will be lower next year. Lower prices for meat animals are anticipated as slight declines in farm prices of beef, hogs, and lambs. We think that retail prices of food also may average lower next year, but they probably will decline less than farmers' prices. Marketing charges probably will increase further because of increases in wages and other costs incurred by marketing firms. The overall increase in the marketing margins, however, is expected to be less than the average since 1950. Accordingly, the farmer's share may drop slightly, about 1 point, from the 38 percent estimated for this year.

Further increases in marketing margins on both beef and pork probably will account for a relatively large share of the increase in the marketing margin on food next year. Some further increase also is expected in the marketing margin for bakery and cereal products, but price spreads for most other food product groups are expected to remain about unchanged.

Figure 8 shows that after moving up in 1957, the farm value and retail cost of pork turned down in mid-1958 and have dropped almost steadily since that time. The marketing margin, however, has increased steadily which means that the farm value has dropped more than the retail cost. This is not unusual for pork. When supplies of hogs increase and farm prices drop, the farm-retail price spread tends to widen because packers find that they need not bid up prices in order to obtain all of the hogs they can handle.

Retailers at such times frequently are reluctant to adjust their prices down as fast or as far as the decline in farm prices. When supplies drop, farm prices usually increase sharply as packers bid against one another to obtain supplies necessary to operate at or near capacity. Retailers, at this time, however, can begin to shift their merchandising efforts to other meats and this, in turn, sometimes results in a sluggish movement of available supplies of pork through retailers. Farm-retail price spreads, therefore, usually decrease slightly when hog supplies are low and prices are high. With some further decline next year in hog prices, the farm-retail price spread probably will rise so the decline in retail prices, if any, may not be noticeable.

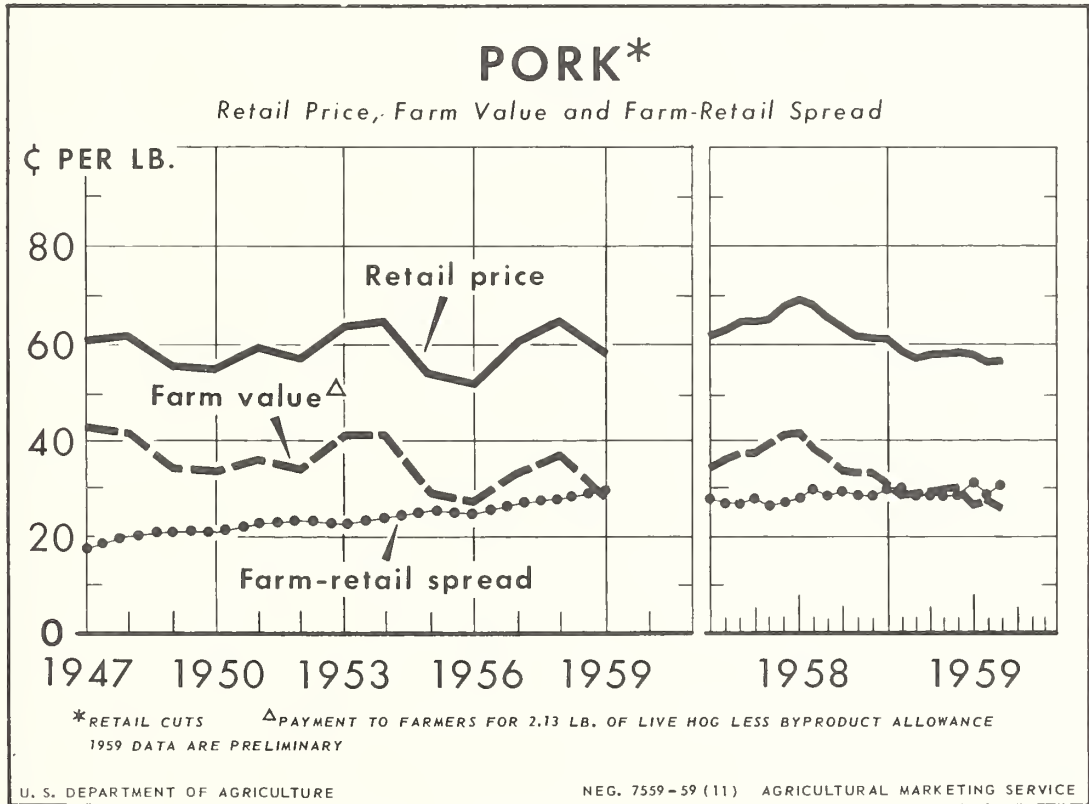


Figure 8

The farm value and retail cost of beef rose sharply during 1956 and 1957. As may be observed in figure 9, they leveled out in 1958 and have remained relatively stable since that time. Although the farm value has been dropping seasonally since April, the farm-retail price spread on beef also has remained relatively stable since mid-1958. Some increase in cattle marketings and slaughter next year likely will result in slightly lower prices, but the farm value probably will drop more than the retail price with some resulting increase in the spread.

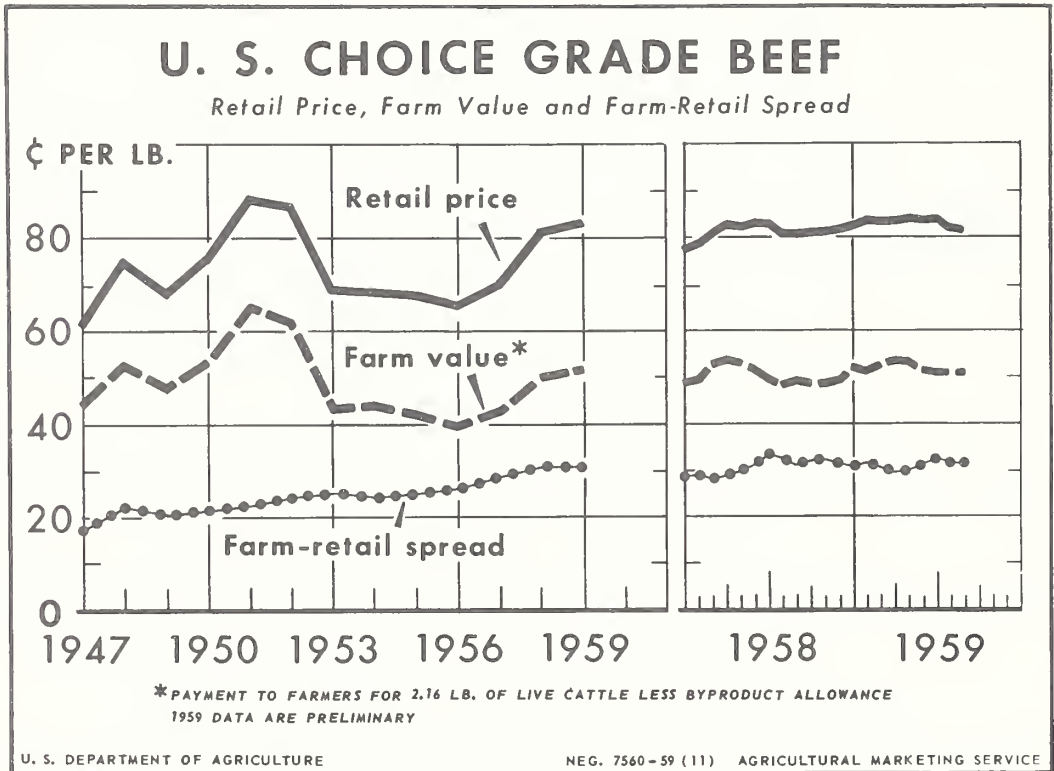


Figure 9

Small increases in farm prices of eggs and broilers are anticipated, but little change is expected in egg or broiler marketing margins and, therefore, only small increases in retail prices are expected. Retailers' pricing policies in the year ahead may influence retail prices of broilers considerably more than changes in supply that might be anticipated. Broilers have become an important competitive battleground for retailers. Frequent and highly attractive retail specials on broilers were the source of considerable controversy in the industry during the past year. A trend toward or away from specials by retailers could affect the average level of prices paid by consumers. We cannot say definitely which direction the average would go if retailers reduced the frequency or extent of their specials on broilers because we don't know how nonspecial or regular prices would be affected. Most probably, however, the average would increase.

We must conclude with statements that have become old friends. For 1960 some increase in food marketing costs are probable. There is little prospect even beyond 1960 of significant reductions in wage or cost rates. This year we can say, however, that the increase in food marketing costs is likely to be smaller than in recent years. We can say, also, that effects of more efficient methods of distribution and improvements in the organization and structure of the marketing system may become more apparent as they have for broilers.

UNITED STATES DEPARTMENT OF AGRICULTURE
Agricultural Marketing Service

THE OUTLOOK FOR MEAT ANIMALS IN 1960

Talk by Earl E. Miller
Agricultural Economics Division
at the 37th Annual Agricultural Outlook Conference
Washington, D. C., 1:00 P. M., Wednesday, November 18, 1959

Livestock production and slaughter in 1960 will show a gain over 1959. Some increase in cattle slaughter seems assured over this year's low rate. Hog production may turn down in 1960 but the total number to be slaughtered will probably be a little larger than this year. Sheep and lamb slaughter next year will likely show a modest gain in line with the uptrend in numbers on hand. Some declines in livestock prices are in prospect for 1960.

Total red meat production will probably set a new high next year, a little above the 28.1 billion pounds produced in 1956. That year per capita consumption rose to 166.7 pounds per person. These takings were made up of 85.4 pounds of beef, 9.5 pounds of veal, 4.4 pounds of lamb and mutton and 67.4 pounds of pork. Meat production declined during 1957 and 1958 but has turned upward again this year. Each consumer will have available about 158.5 pounds of meat this year. The gain over last year will largely be in pork as beef production is being held down by withholdings from slaughter for herd expansion.

Meat consumption per person next year is forecast at 161 pounds, up about 2.5 pounds from 1959. The cyclical increase in cattle slaughter will account for most of the increase. Consumption of beef per person will likely be around 83 pounds, a rate of taking exceeded only by 1956 and 1957. The probable gain in pork output will about be offset by the gain in population so that consumption per person next year will be close to the 67 pounds in view for this year. Veal and lamb and mutton consumption may be up slightly next year.

The size of the nation's cattle herd has not increased as fast as has population. Cattle numbers and beef and veal output increased slowly and at about the same rate from 1900 to about 1940. Since then numbers have increased more rapidly but beef and veal production has trended sharply upward. Since 1953 beef and veal output has been larger relative to the 1900-1909 average than has population. Increased production of beef and veal per animal on hand, has made it possible for beef and veal output to outrun numbers. This has come from a change in the makeup of inventories and because production has become more efficient. Briefly, the rising proportion of beef cattle in herd inventories has meant a smaller proportion of the calf crop is slaughtered as calves and more of the mature animals have been fed to heavier weights before slaughtering.

Cattle numbers are expected to continue upward next year. Average slaughter weights for cattle may be a little lower than the record level being established this year. Hence, the gain in total beef output will not be unusually large.

Typically during the early stages of the cattle cycle cow and calf slaughter are cut back sharply. Steer slaughter may be postponed for a time by holding for additional weight gains, but soon increases. The gain in steer and heifer slaughter -- many of them marketed as fed cattle -- has held beef output at a relatively high level despite the reduction in cow slaughter.

Next year combined steer and heifer slaughter will show some increase. Steer and heifer numbers on farms were a record last January and much of the gain being made this year will be in these classes. Cow and calf slaughter are each expected to turn upward again during 1960. The prospective gain in slaughter of all cattle and calves reflects the quicker buildup in the number of young slaughter stock. It would still be low enough to allow cattle numbers to continue upward at a rather fast rate.

Cattle prices rose rather steadily from late 1956 to early 1958. Since then prices of slaughter cattle have tended to level out but feeder prices have increased, although somewhat more slowly than before. Hence feeders and the lower grades of slaughter cattle advanced the most.

The main lesson for 1960 is that cattle prices will likely continue to drift downward. We have already seen a greater decline this fall in feeder and cow prices than fed cattle. Part of this is seasonal but is typical during downtrending prices.

Hog slaughter has increased sharply this year and prices have been lower than in 1958. About 87 million hogs will be slaughtered this year, 12 percent more than in 1958. Prices received by farmers this year will average about \$5 per 100 pounds below last year.

The outlook for hogs next year is based largely on the increase in supply already in progress and the prospects for a slight reduction in next spring's pig crop. Producers' intentions in June were to increase fall farrowings 8 percent. In September producers in 10 of the Corn Belt States indicated they planned slightly fewer farrowings than in June. These farrowings will influence slaughter through the first 4-6 months of 1960 when hog slaughter will average somewhat above 1959. As a result, prices of hogs are likely to be near present levels during next winter and spring.

The supply of hogs during the last half of next year will come largely from the 1960 spring pig crop. The 10-State intentions in September were for a 4 percent reduction in the first half of the spring season (December-February). These 3 months accounted for an unusually large percentage of the spring crop last year. The low hog-corn price ratio this summer and a rather disappointing experience with early pigs in 1959 were the principal factors leading to such a reduction. However, the corn crop is a record and if there is some shift toward later farrowings the total 1960 spring pig crop may be down only slightly from this year. Such a spring crop would mean that hog prices in the fall and winter of 1960-61 would be at least as high and perhaps a little higher than this fall and winter.

Production of lamb and mutton has also gained more during the past 10 years than have numbers. While some gain in average slaughter weight has taken place, notably in the last 2 years, the gain in productivity largely reflects higher lambing rates and lower death losses. The number of lambs saved as a percentage of ewes one year old or older has risen nearly 1 percent per year in the last 10 years. Hence, during this period lamb and mutton production has shown a strong uptrend in contrast to the slow growth in numbers.

Sheep and lamb numbers have increased during the past 2 years and some further gain is being made this year. This expansion has been encouraged by some improvement in range conditions, the wool incentive program and by higher prices for meat animals generally. The wool program is unchanged for next year. With average weather, sheep numbers will likely continue their slow expansion. Lamb and mutton output in 1960 is expected to be up enough to provide each consumer with fractionally more than the 4.5 pounds per person in prospect for this year. Prices next year will probably average close to 1959 prices.

Retail beef prices have fluctuated within relatively narrow limits since mid-1958. During this same period retail prices for pork have trended downward. For the year as a whole, 1959 retail beef prices will average slightly higher but pork significantly lower than in 1958. Beef consumption per person this year is nearly the same as last year but pork is up about 6 pounds per person. Putting all these together, the retail value of meat consumed per person this year will be nearly the same as last year. Since disposable personal incomes are up, the percentage of the consumer's dollar spent for meat declined in 1959. The retail value of all meat was 5.0 percent of disposable income in 1958; this year it will be around 4.8 percent.

The strong demand for meat is expected to continue. You have already heard that personal incomes are expected to be up next year over this year. The inelastic nature of the demand for meat indicates that the increased quantities of meat produced next year will move into consumption at somewhat lower prices. Hence, it appears likely that the longtime downtrend in the percentage of the consumer's dollar spent for meat will continue in 1960.

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE

THE OUTLOOK FOR PEANUTS IN 1959-60

Statement presented by George W. Kromer
Agricultural Economics Division
at the 37th Annual Agricultural Outlook Conference
Washington, D. C., 1:30 P. M., Tuesday, November 17, 1959

The total supply of farmers' stock peanuts during the 1959-60 marketing year that began August 1, 1959 is placed at about 2,150 million pounds, nearly the same as last year but otherwise the largest since 1950. The 45 percent increase in carryover stocks on August 1, 1959 over a year earlier about offset the 10 percent drop in peanut production. Nevertheless, the 1959 peanut crop is well above probable food and farm uses, and CCC will acquire the surplus under the support program. CCC last season acquired about one-fifth of the record 1958 peanut crop.

The 1959 peanut crop was estimated as of November 1, 1959 at 1,656 million pounds compared with 1,836 million produced in 1958. The decline reflects a 2 percent reduction in acreage to be picked and threshed along with yields somewhat below last year's record high.

Acreage allotments for 1959 are practically unchanged from 1958. The slight reduction in acreage planted alone for all purposes this year is attributed to the continued substitution of corn for peanuts for hogging in some areas and an increased signup of peanut growers in the Conservation Reserve program, especially in Georgia, Alabama, Oklahoma, and Texas.

The Southeastern area of the U. S. accounted for a big share of the decline in 1959 peanut production. Based on November 1 indications, output in this area was down 15 percent from last year. Heavy rains late in the season heavily damaged peanuts caught on the ground. Many peanuts brought in after the rains carried a high percentage of damage. Indicated 1959 output in the Virginia-Carolina area is down about 5 percent from last year whereas the Southwestern output is off only about 4 percent. Estimated yield per acre for the U. S. is 1,107 pounds compared with last year's record of 1,205 pounds.

Prospects are that prices received by farmers for 1959 crop peanuts will average lower than the 10.6 cents per pound received for the 1958 crop. In fact, peanut farm prices this year are likely to be at the lowest level since the 1946 season when they averaged 9.1 cents per pound.

Lower prices this year reflect the 10 percent drop in the support price and another crop of peanuts well in excess of food and farm requirements. The national average support price for 1959 crop peanuts is 9.7 cents per pound (\$193.50 per ton), compared with 10.7 cents per pound (\$213.20 per ton) last year. This means that farm prices will average near the loan value, as in recent years. The loan value is the support price less charges for storage, inspection, and grading, and for expenses of the cooperatives that market the peanuts. It averages about half a cent less than support. Loans on 1959 crop peanuts are available to individual producers and grower associations through January 31, 1960 and will mature May 31, 1960 or earlier on demand by CCC.

Prices to farmers for 1959 crop Spanish and Runner peanuts so far this season are averaging at about the CCC loan value, about 10 percent less than last year. Virginia-Carolina peanuts have just started to move in volume and prices are also running near the reduced loan rate for this year.

Civilian consumption of peanuts in the postwar era has averaged about 6.5 pounds per person, farmers' stock basis (4.5 pounds shelled), about the same as for 1937-41. Supplies of peanuts in most years were plentiful and prices averaged near the support.

Current indications point to an increase in the consumption of peanuts during the 1959-60 marketing year. Supplies available will be the heaviest in recent years and the 1959 price support is 1.0 cent per pound below last year, and the lowest in the postwar years. These factors are setting the stage for some increase in the consumption of peanuts, but the rate will depend largely upon how much of the anticipated reduction in farm prices is reflected in the price of peanut products purchased by consumers.

If the consumption of peanuts per person should rise slightly in 1959-60 and farm uses should remain about the same as in recent years, about 350 million pounds or 20 percent of the 1959 crop would be available for crushing, exports, and addition to stocks. As most of the surplus peanuts will be acquired by CCC under the support program, the quantity crushed and exported will mainly depend on the Corporation's diversion policy.

As of the end of October, farmers had placed 265 million pounds of 1959 crop peanuts under loan, about 85 percent of which were in the Southeastern area.

Prospects for 1960-61

If growing conditions are average, the 1960 peanut crop probably will result in a moderate surplus above food and farm uses.

A marketing quota requirement of 934,000 tons (1,868 million pounds) of 1960 crop peanuts and a national allotment of 1,610,000 acres for picking and threshing was announced by the USDA on October 6, 1959. This is the minimum marketing quota and acreage allotment permitted under existing legislation.

Peanut producers will vote in a referendum to be held December 15 on application of marketing quotas for the 1960, 1961, and 1962 crops. Quotas have been in effect since 1949. A two-thirds favorable vote in a referendum is required in order to continue quotas. Existing legislation provides that if quotas are in effect, the price of peanuts will be supported at some level between 75 and 90 percent of parity. If quotas are rejected, support will be at 50 percent of parity to cooperators.

If marketing quotas for 1960 are approved, production probably will be large enough to keep prices around support. The actual level of support under the marketing quota has not been announced. Because of the uptrend in yields, production of peanuts from the minimum allotment of 1.6 million acres provides a surplus of peanuts above edible requirements even though population is increasing.

UNITED STATES DEPARTMENT OF AGRICULTURE
Agricultural Marketing Service

OUTLOOK FOR RICE IN 1960

Talk by Robert E. Post
Agricultural Economics Division
At the 37th Annual Agricultural Outlook Conference
Washington, D. C., 2:40 P.M., Tuesday, November 17, 1959

The Rice Situation in 1959-60

The rice carryover on August 1, 1959 was less than half of the record of only three years earlier. The carryover on August 1, 1959, in terms of rough rice, was 15.7 million cwt., compared with 34.6 million cwt. on August 1, 1956. During the past year, stocks were reduced 2.5 million cwt. or 14 percent. The reduction in carryover stocks during the past three years reflects acreage controls and the Acreage Reserve Program, as well as the high level of exports.

The 1959 crop as of November 1 was estimated at 53.1 million cwt., 6.1 million or 13 percent larger than a year earlier, reflecting increased acreage due to the discontinuance of the Acreage Reserve Program and record yields. With negligible imports, the total supply for the 1959-60 marketing year amounts to 69.0 million cwt.

Domestic use of rice in 1959-60 is estimated at 26.4 million cwt., 0.5 million above a year earlier. Domestic use is made up of the following items, in million cwt., with 1958-59 in parentheses: Food, 18.8 (18.6); brewers use, 5.0 (4.7); seed, 2.1 (2.1) and feed, 0.5 (0.5). Exports are tentatively estimated at 29.0 million cwt., sharply above the 19.7 million last year. On the basis of these estimates, the carryover August 1, 1960 may be about 13.6 million cwt., down 2.1 million from the carryover August 1, 1959.

Rice Production in the United States

Rice yields per harvested acre have increased in each year since 1945, except for 1951. The increase was gradual from 1945 to 1954 and then in 1955 it was sharp. In 1959, the yields per harvested acre are a record 33.5 cwt., slightly above a year earlier, but almost half again as much as the 1945-54 average of 22.52 cwt. Except for 1950, rice production increased each year from 1939 to 1954. Because of the increase in the carryover following the record 1954 crop and small exports in that year, it became necessary to impose acreage allotments and proclaim marketing quotas in 1955. Although yields increased each year from 1955-59, the reduced acreage has held production well below the 1954 level. Lower production was a major factor in reducing the size of the carryover but the reduction has not been enough to permit the discontinuance of production controls.

Table 1 .- Rice, in terms of rough: Supply and distribution,
United States, 1955-59 and 1960 projected 1/

Items	Year beginning August 1					
	1955	1956	1957	1958	1959	1960
	<u>2/</u>	<u>3/</u>	<u>4/</u>	<u>2/</u>	<u>3/</u>	<u>4/</u>
	Mil. cwt.	Mil. cwt.	Mil. cwt.	Mil. cwt.	Mil. cwt.	Mil. cwt.
<u>Supplies</u>						
Beginning stocks	26.7	34.6	20.1	18.2	15.7	13.6
Farm production <u>5/</u>	56.0	49.5	43.0	47.0	53.1	52.0
Imports <u>6/</u>	.2	.4	.2	.2	.2	.2
Total <u>7/</u>	82.3	84.6	62.8	61.3	69.0	65.8
<u>Disappearance</u>						
Food <u>8/</u>	19.1	19.2	19.0	18.6	18.8	19.0
Industry <u>9/</u>	6.1	5.1	4.8	4.7	5.0	5.0
Feed and seed	3.9	2.7	2.5	2.6	2.6	2.5
Total domestic	29.1	27.0	26.3	25.9	26.4	26.5
<u>Exports</u>	18.6	37.5	18.3	19.7	29.0	
Total disappearance	47.7	64.5	44.6	45.6	55.4	
<u>Ending stocks</u>	34.6	20.1	18.2	15.7	13.6	

1/ Milled rice converted to rough basis at annual extraction rate.

2/ Preliminary.

3/ Tentative.

4/ Projected.

5/ Includes estimates of production in minor States.

6/ Consist mostly of broken rice.

7/ Adjusted to equal total distribution.

8/ Includes shipments to territories and military food use at home and abroad.

9/ Primarily for beer production.

Legislation

Legislation (P.L. 85-835) enacted in 1958 provided that: (1) The minimum national allotment for rice is to continue indefinitely at the 1957 level of 1,652,596 acres (the same as for 1956); (2) the rate of price support for the 1959 and 1960 crops will be unchanged at not less than 75 percent or more than 90 percent of parity, the level to be determined by the Secretary and (3) the minimum support level for 1961 will be reduced to 70 percent of the parity price and for 1962 and subsequent years to not less than 65 percent, with the maximum to remain at 90 percent. The only new legislation enacted in 1959 relating to rice is the \$50,000 price support limitation (P.L. 86-80).

The Rice Outlook for 1960-61

If about the same acreage of rice is seeded in 1960 as in 1959 and if yields are about equal to the average of the past three years, a crop of about 52.0 million cwt. would be produced, compared with 53.1 million cwt. in 1959 and 53.1 million, the 1953-57 average. With domestic disappearance estimated at 26.5 million cwt., exports would have to be 25.7 million cwt. or more to avoid increasing the carryover August 1, 1961. Exports of this size would be below the estimated 29.0 million cwt. projected for 1959-60 and below the record 37.5 million cwt. exported in 1956-57 but above any other year.

The 1960 national acreage allotment, less a national reserve of 300 acres, has been apportioned among the 13 rice-producing States in the same proportion as they shared in the total acreage allotted in 1956, as provided by existing legislation. Marketing quotas, if proclaimed, together with the price support for the 1960 rice crop will be announced shortly after November 15.

Rice Prices and Support Program

Average rice prices received by farmers, including an allowance for unredeemed loans, have been above national support levels in all but two years, 1951-52 and 1954-55. In 1958-59, the price to farmers averaged 33 cents above the national average support of \$4.48 per cwt., reflecting a large proportion of higher priced long-grain rice put under the support program. In 1959-60, they are expected again to average above the support rate announced at \$4.38 per cwt.

Farmers put about a fourth of their 1958-crop rice under price support compared with about a third of their 1957 crop. Of the 11.6 million cwt. put under price support from the 1958 crop, farmers delivered 6.3 million to the CCC. The year before, farmers delivered 10.6 million cwt. out of 13.6 million put under support. Bluebonnet and Century Patna were the principal varieties delivered to CCC of the 1958 crop.

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The Rice Situation, which is published once a year,
is scheduled for release on December 24, 1959

UNITED STATES DEPARTMENT OF AGRICULTURE
Agricultural Marketing Service

OUTLOOK FOR TOBACCO IN 1960

Talk by Arthur G. Conover
Agricultural Economics Division
at the 37th Annual Agricultural Outlook Conference
Washington, D. C., 9:15 A. M., Wednesday, November 18, 1959

For most kinds of tobacco, total supplies during the 1959-60 marketing year will be lower than in 1958-59 and appreciably lower than the high levels of 3 to 5 years ago. Total production of tobacco this year is 5 percent above 1958 but the third smallest since 1943. Acreage allotments for most farms were the same in 1959 as in 1958 but acreage for harvest increased 7 percent from the 50-year low of 1958. The acreage increase reflects mainly the return to production of acreage that last year was held in the acreage reserve program of the Soil Bank. Indications are that 1959 average yields per acre for flue-cured were third highest on record and for burley, about equal to the previous high of 1956; all other types had yields ranking above and some well above the recent 5-year average. For several kinds of tobacco, the decline in carryover more than offsets the production increase this year compared with last. The 1959 crops of flue-cured and burley, the major cigarette tobaccos, are below anticipated 1959-60 disappearances (domestic use plus exports), thus carryovers by the beginning of the 1960-61 marketing year are likely to be reduced still further.

The 1960 marketing quota and acreage allotment for flue-cured will be announced by December 1 and 1960 quotas and acreage allotments for other kinds of tobacco will be announced by February 1. Soon after the quota announcements, growers of Maryland, Connecticut Valley binder and Ohio filler-Wisconsin binder tobaccos will vote in separate referendums on whether they favor marketing quotas on their 1960, 1961 and 1962 crops. At least two-thirds of the growers voting must approve if quotas are to be in effect. Marketing quotas will be in effect for the 1960 crops of flue-cured, burley, fire-cured, dark air- and sun-cured since growers approved them in referendums held last February and in December and February 1958.

Under existing law, the Government price supports for the kinds of tobacco under Federal marketing quotas in 1960 will be supported at 90 percent of parity except for fire-cured, dark air-cured, and sun-cured types. The support levels for the latter types are set at fixed percentages of the burley support (75 percent for fire-cured and $66\frac{2}{3}$ percent for dark air- and sun-cured) but they cannot go above 1957 levels unless 90 percent of the parities for these types exceeds such levels.

Position of the Different Kinds of Tobacco

Most of the three-quarters of a million farm families growing tobacco depend on it as a vital source of cash income. They grow nearly 2 dozen types, which are combined into broader groups for this discussion which follows:

Flue-cured: The 1959-60 total supply of this leading cigarette and export tobacco at 3.3 billion pounds is 2 percent less than for 1958-59 and 10 percent below the record level of 3 years ago. Though the 1959 crop is 2 percent above last year, it is third smallest since 1948. The drop in carryover from mid-1958 to mid-1959 more than offsets the increase in this year's crop over last and thus lowers the total supply. Domestic use of flue-cured during 1958-59 was virtually the same as a year earlier despite the significant increase in cigarette output. Domestic use of flue-cured during each of the past 4 years was below that in each of the marketing years from 1950 to 1954. Exports of flue-cured generally account for more than four-fifths of total unmanufactured exports. The volume of flue-cured exported in 1958-59 was virtually the same as in 1957-58 and about 1 percent below the average for the 10 years preceding 1958-59. During 1959-60, domestic use might increase some but by a smaller percentage than cigarette output. There appears to be little prospects for any significant increase in flue-cured exports during the marketing year ending June 30, and they seem likely to be fairly near the 1958-59 level.

All except a small fraction of the 1959 flue-cured crop has been marketed. The season average price received by growers is estimated at a little above 58 cents per pound--only slightly different than the average for the 1958 crop. The 1959 support level at 55.5 cents per pound is nine-tenths of a cent above the 1958 level and above that for any previous crop. About 4 percent of the crop has been placed under Government loan in contrast with over 13 percent last year.

Burley: The 1959-60 total supply of burley, the second ranking cigarette tobacco, at over 1.7 billion pounds is about 1 percent lower than for 1958-59 and 7 percent below the peak level of 5 years ago. The 1959 crop is estimated at about 6 percent above the 16-year low of 1958. Carryover declined 4 percent and more than offsets the increase in production between this year and last. Domestic use of burley in 1958-59 rose a little and exports showed a substantial increase over the level of the preceding 2 years. Burley tobacco auctions are expected to start by late November. The level of price support is 57.2 cents per pound--3 percent higher than for the 1958 crop and nearly 11 percent higher than for the 1957 crop. Auction prices are expected to average well above the support level. In the past 3 years, only 1 to 3½ percent of the crops were placed under Government loan--a marked contrast with each of the 5 previous years.

Maryland: The 1959-60 total supply of Maryland tobacco is estimated at 98 million pounds--4 percent less than for 1958-59 and the lowest in 9 years. The 1959 crop may be a little larger than the estimated 1958 crop, but carryover may be down about 7 percent. Domestic use in 1958-59 was moderately below a year earlier but exports rose 31 percent to a new postwar high. Auction marketings for the 1959 crop will take place next spring and summer. Government price support will not be available for the 1959 crop marketings since more than a third of the producers voting disapproved quotas and none were in effect on the 1959 crop. The auction market price average for the generally high quality 1958 crop was a record 61.8 cents per pound. The 1958 price support level last season was 50.8 cents per pound; about 4 percent of market deliveries went under Government loan in contrast with 17 percent in the year previous.

Fire-cured: The 1959-60 total supply of fire-cured tobacco at about 177 million pounds is close to the record low of 1958-59. The 1959 crop is about a fourth larger than the all-time low of a year ago and the increase just about offsets the 9 percent decline in carryover. Domestic use of fire-cured fell off in 1958-59; the main outlet, snuff manufacture, has been on the downtrend in recent years. A substantial share of fire-cured is exported; the 1958-59 exports dropped 15 percent from a year earlier to a new postwar low. Auction markets for Virginia fire-cured usually open by early December and, for Kentucky-Tennessee fire-cured in early January. The 1959 support level is 38.8 cents per pound, the same as in 1958 and 1957. Receipts under Government loan from the 1958 crop of Kentucky-Tennessee fire-cured were much smaller than in most previous years but loan placements of Virginia fire-cured were the most in 6 years.

Dark Air-cured and Sun-cured: The 1959-60 total supply of dark air- and sun-cured tobacco at about 92 million pounds is 4 percent lower than 1958-59 and the smallest on record. The 1959 production is well above the record low of 1958 but the substantial drop in carryover more than offsets the increase. The 1958-59 use in domestic products was below that of a year earlier while exports increased moderately--mainly attributable to relatively large shipments of One Sucker. The principal domestic use is in plug chewing which has been trending fairly steadily downward. Auctions for the 1959 crops will be opening shortly; the level of price support is 34.5 cents per pound--the same as in the 1958 and 1957 seasons. Government receipts under loan from the 1958 crop were relatively small and far lower than in previous years.

Cigar Filler: The 1959-60 total supply of Pennsylvania and Ohio filler at about 185 million pounds is 4 percent above 1958-59 when it was second lowest on record. The Pennsylvania crop is the largest in 8 years and the Ohio crop, the largest in 4 years. Carryover of the continental filler types was down slightly from a year earlier. The Puerto Rican crop of cigar filler harvested early this year was a little smaller than a year earlier and stocks on October 1 were the lowest since 1952. The 1958-59 disappearance of the cigar filler types was moderately higher than a year earlier due to increased domestic use and larger-than-usual exports.

Connecticut Cigar Binder: The 1959-60 total supply of these types at 43 million pounds is practically the same as a year ago, but down about a half from 5 years ago. This year's production was appreciably larger than last year's record low but was still only a third as much as 5 years ago. The 1958-59 domestic use and exports of these types fell off sharply from a year earlier. The extensive use of sheet binder on cigars has greatly reduced the domestic use of these types. The 1959 price support for these types is 39.6 cents per pound--a fourth lower than last year's level. Last January the Department announced a change in the method of computing the parity price for these types which lowered it considerably.

Wisconsin Cigar Binder: The 1959-60 total supply of Wisconsin binder types at 71 million pounds is a little larger than 1958-59 but below any previous year. The 1959 production is the largest since 1950 but carryover changed comparatively little from a year ago. Domestic use in 1958-59 was down moderately but exports increased to a new high. The 1959 support levels at 26.5 cents for Southern Wisconsin and 32.0 cents for Northern Wisconsin are 1 cent above last season's levels.

Shade-grown Cigar Wrapper: The 1959-60 total supply of Connecticut Valley and Georgia-Florida cigar wrapper is 38 million pounds--a record high. Production in both areas increased this year over last and was a record high in Georgia-Florida; carryover was almost the same as a year earlier. The 1958-59 domestic use held nearly even with the preceding year while exports just topped the record high of 1957-58.

Tobacco Products

Cigarettes: Cigarette output will reach a new high in 1959 and a further gain is likely in 1960. The 1959 output is estimated at a record 485 billion--over 3 percent more than in 1958. About 460 billion will be smoked by 58 million smokers--35 million men and 23 million women--in the United States and its overseas forces. Another 5 or 6 billion will be shipped to Puerto Rico, Hawaii, Alaska, Virgin Islands and other U. S. areas. About 19 billion will be exported to foreign countries. Longer-term prospects point to a total output of 570 billion cigarettes by 1965 and 740 billion by 1975. This would represent an 18 percent increase by 1965 and a 53 percent increase by 1975.

U. S. tobacco growers have been confronted with a paradoxical situation in the past 5 years. From fiscal years 1954-55 to 1958-59, cigarette output rose from 408 billion to 479 billion--17 percent--yet use of domestic leaf in cigarettes on a farm-sales weight basis was virtually the same in both years. If (1) the technology of processing and manufacture, (2) the output-consumption pattern and (3) the proportion of imported leaf in blends, all three had remained unchanged, about 200 million additional pounds of domestic leaf--farm-sales weight--would have been used in 1958-59.

Approximate estimates of the reductions in domestic leaf requirements attributable to important factors are shown below:

	<u>Million pounds*</u> <u>(farm-sales weight)</u>	<u>Percentage</u> <u>distribution</u>
Use of tobacco sheet and additional stems	92	46.0
Decreased size of average tobacco column due to filters and smaller dimensions of some cigarettes	81	40.5
Increased proportion of imported tobacco	27	13.5
Total	200	100.0

*Important to keep in mind is that these estimates do not represent tobacco material at the cigarette making stage but rather its farm-sales weight equivalent.

It seems likely that the factors and influences at work in the past 5 years have not yet run their course and that these and probably others will continue to affect domestic leaf requirements in the years ahead.

Cigars and Cigarillos: The 1959 consumption of cigars and cigarillos produced in this country is estimated at over 6.9 billion--7 percent above 1958 and the highest since 1923. About 15 percent will be cigarillo-size, which were insignificant during the years of high output in the 1920's. About 12 million men--one out of five, 18 years or over--smoke cigars regularly or occasionally. A further increase in consumption of cigars and cigarillos is expected in 1960. Longer term prospects point to a total U. S. output of at least 7.6 billion by 1965 and 9.2 billion by 1975--up 10 percent and 33 percent, respectively, from 1959. In late 1958 and early 1959, production of cigarette-size cigars--not counted with large cigars and cigarillos--was far above the level of recent years but it has declined sharply from the peak early this year. The 1959 total may be around 500 million, approximately 8 times the 1953-57 average. Sheet tobacco binders have replaced natural leaf binders on a large proportion of cigars and cigarillos and sheet tobacco is used as wrapper for several brands of cigarette-size cigars.

Smoking Tobacco: The 1959 output of smoking tobacco for pipes and "roll-your-own" cigarettes is estimated at 74 million pounds--3 percent lower than in 1958 but 5 percent above the low point reached in 1957. No appreciable increase in production is believed likely in 1960 since the outlook for consumer incomes is generally favorable. Smoking tobacco output declined steadily from 1950 to 1957 but increased significantly in 1958--probably due in part to recessionary influences. Packaged smoking tobacco is generally more economical to buy than cigars or cigarettes.

Chewing Tobacco and Snuff: Chewing tobacco products and snuff utilize significant quantities of burley, dark air-cured, cigar binder and fire-cured tobaccos. The 1959 outputs of chewing tobacco and snuff are estimated at about 68 and 34 million pounds, respectively. Output of each probably will be about 2 percent lower than 1958; it will be a new record low for chewing tobacco and the lowest since 1920 for snuff. The rates of decline in 1959 slackened compared with those in the preceding 3 years. A further gradual decline in chewing tobacco consumption is expected in the years ahead. Snuff consumption was remarkably stable through 1955 then fell quite sharply in the next 3 years. In view of the slower rate of decline in 1959, snuff output in 1960 may not be much different than this year's.

Exports

Exports of unmanufactured tobacco in the 1958-59 marketing year totaled 536 million pounds, farm-sales weight-- $1\frac{1}{2}$ percent above 1957-58 and slightly above the average of the previous 10 years. Tobacco exports in 1959-60 are expected to be fairly near the 1958-59 level. The 1958-59 export volume is equivalent to 29 percent of this year's total production which is one of the smallest of the past 16 years. In fiscal year 1958-59, sales for foreign currency (P.L. 480 shipments) accounted for $8\frac{1}{2}$ percent of the total leaf exports compared with about $6\frac{3}{4}$ percent in 1957-58 and $10\frac{1}{2}$ percent in 1956-57. The law now sets the cutoff date for P.L. 480 sales at December 31, 1961. The Congress has authorized additional funds which will enable overall programming to continue at about the same rate as in the past year. Sustaining the export demand for U. S. tobacco is the steady increase in cigarette manufacture and the rising economic activity abroad, particularly in Western Europe. The gold and dollar position of most European countries has continued to improve. Adversely affecting U. S. tobacco exports are increased competition from other producing countries and trade barriers of various forms in many countries. Of considerable concern to foreign buyers are the significant increases in the prices paid at U. S. auctions in recent years, and the advances in Government support prices which have been mandatory under the formula provided by existing law.

UNITED STATES DEPARTMENT OF AGRICULTURE
Agricultural Marketing Service

OUTLOOK FOR RICE IN 1960

Talk by Robert E. Post
Agricultural Economics Division
At the 37th Annual Agricultural Outlook Conference
Washington, D. C., 2:40 P.M., Tuesday, November 17, 1959

The Rice Situation in 1959-60

The rice carryover on August 1, 1959 was less than half of the record of only three years earlier. The carryover on August 1, 1959, in terms of rough rice, was 15.7 million cwt., compared with 34.6 million cwt. on August 1, 1956. During the past year, stocks were reduced 2.5 million cwt. or 14 percent. The reduction in carryover stocks during the past three years reflects acreage controls and the Acreage Reserve Program, as well as the high level of exports.

The 1959 crop as of November 1 was estimated at 53.1 million cwt., 6.1 million or 13 percent larger than a year earlier, reflecting increased acreage due to the discontinuance of the Acreage Reserve Program and record yields. With negligible imports, the total supply for the 1959-60 marketing year amounts to 69.0 million cwt.

Domestic use of rice in 1959-60 is estimated at 26.4 million cwt., 0.5 million above a year earlier. Domestic use is made up of the following items, in million cwt., with 1958-59 in parentheses: Food, 18.8 (18.6); brewers use, 5.0 (4.7); seed, 2.1 (2.1) and feed, 0.5 (0.5). Exports are tentatively estimated at 29.0 million cwt., sharply above the 19.7 million last year. On the basis of these estimates, the carryover August 1, 1960 may be about 13.6 million cwt., down 2.1 million from the carryover August 1, 1959.

Rice Production in the United States

Rice yields per harvested acre have increased in each year since 1945, except for 1951. The increase was gradual from 1945 to 1954 and then in 1955 it was sharp. In 1959, the yields per harvested acre are a record 33.5 cwt., slightly above a year earlier, but almost half again as much as the 1945-54 average of 22.52 cwt. Except for 1950, rice production increased each year from 1939 to 1954. Because of the increase in the carryover following the record 1954 crop and small exports in that year, it became necessary to impose acreage allotments and proclaim marketing quotas in 1955. Although yields increased each year from 1955-59, the reduced acreage has held production well below the 1954 level. Lower production was a major factor in reducing the size of the carryover but the reduction has not been enough to permit the discontinuance of production controls.

Table 1 .- Rice, in terms of rough: Supply and distribution,
United States, 1955-59 and 1960 projected 1/

Items	Year beginning August 1					
	1955	1956	1957	1958	1959	1960
	<u>2/</u>	<u>3/</u>	<u>4/</u>	<u>2/</u>	<u>3/</u>	<u>4/</u>
	Mil. cwt.	Mil. cwt.	Mil. cwt.	Mil. cwt.	Mil. cwt.	Mil. cwt.
<u>Supplies</u>						
Beginning stocks	26.7	34.6	20.1	18.2	15.7	13.6
Farm production <u>5/</u>	56.0	49.5	43.0	47.0	53.1	52.0
Imports <u>6/</u>	.2	.4	.2	.2	.2	.2
Total <u>7/</u>	82.3	84.6	62.8	61.3	69.0	65.8
<u>Disappearance</u>						
Food <u>8/</u>	19.1	19.2	19.0	18.6	18.8	19.0
Industry <u>9/</u>	6.1	5.1	4.8	4.7	5.0	5.0
Feed and seed	3.9	2.7	2.5	2.6	2.6	2.5
Total domestic	29.1	27.0	26.3	25.9	26.4	26.5
<u>Exports</u>	18.6	37.5	18.3	19.7	29.0	
Total disappearance	47.7	64.5	44.6	45.6	55.4	
<u>Ending stocks</u>	34.6	20.1	18.2	15.7	13.6	

1/ Milled rice converted to rough basis at annual extraction rate.

2/ Preliminary.

3/ Tentative.

4/ Projected.

5/ Includes estimates of production in minor States.

6/ Consist mostly of broken rice.

7/ Adjusted to equal total distribution.

8/ Includes shipments to territories and military food use at home and abroad.

9/ Primarily for beer production.

Legislation

Legislation (P.L. 85-835) enacted in 1958 provided that: (1) The minimum national allotment for rice is to continue indefinitely at the 1957 level of 1,652,596 acres (the same as for 1956); (2) the rate of price support for the 1959 and 1960 crops will be unchanged at not less than 75 percent or more than 90 percent of parity, the level to be determined by the Secretary and (3) the minimum support level for 1961 will be reduced to 70 percent of the parity price and for 1962 and subsequent years to not less than 65 percent, with the maximum to remain at 90 percent. The only new legislation enacted in 1959 relating to rice is the \$50,000 price support limitation (P.L. 86-80).

The Rice Outlook for 1960-61

If about the same acreage of rice is seeded in 1960 as in 1959 and if yields are about equal to the average of the past three years, a crop of about 52.0 million cwt. would be produced, compared with 53.1 million cwt. in 1959 and 53.1 million, the 1953-57 average. With domestic disappearance estimated at 26.5 million cwt., exports would have to be 25.7 million cwt. or more to avoid increasing the carryover August 1, 1961. Exports of this size would be below the estimated 29.0 million cwt. projected for 1959-60 and below the record 37.5 million cwt. exported in 1956-57, but above any other year.

The 1960 national acreage allotment, less a national reserve of 300 acres, has been apportioned among the 13 rice-producing States in the same proportion as they shared in the total acreage allotted in 1956, as provided by existing legislation. Marketing quotas, if proclaimed, together with the price support for the 1960 rice crop will be announced shortly after November 15.

Rice Prices and Support Program

Average rice prices received by farmers, including an allowance for unredeemed loans, have been above national support levels in all but two years, 1951-52 and 1954-55. In 1958-59, the price to farmers averaged 33 cents above the national average support of \$4.48 per cwt., reflecting a large proportion of higher priced long-grain rice put under the support program. In 1959-60, they are expected again to average above the support rate announced at \$4.38 per cwt.

Farmers put about a fourth of their 1958-crop rice under price support compared with about a third of their 1957 crop. Of the 11.6 million cwt. put under price support from the 1958 crop, farmers delivered 6.3 million to the CCC. The year before, farmers delivered 10.6 million cwt. out of 13.6 million put under support. Bluebonnet and Century Patna were the principal varieties delivered to CCC of the 1958 crop.

* * * * *

The Rice Situation, which is published once a year,
is scheduled for release on December 24, 1959

THE OUTLOOK FOR VEGETABLES AND POTATOES IN 1960

Talk by Will M. Simmons
Agricultural Economics Division
at the 37th Annual Agricultural Outlook Conference
Washington D. C., 1:30 P. M., Tuesday, November 17, 1959

SUPPLY AND DEMAND PROSPECTS

Supplies of vegetables for fresh market into mid-1960 may be the same to moderately larger than those in the first 6 months of 1959. Supplies of canned vegetables available in the current marketing season are near the heavy supplies of last season, and the supply of frozen vegetables is moderately larger. Slightly more sweetpotatoes are available than a year ago, but potato supplies available this fall and winter are materially below the burdensome levels of a year earlier. Dry edible beans continue in heavy supply, and supply of dry peas is a third larger than the relatively light supply of last season.

Prospects are for a continued high level of consumer income in 1960. Thus, domestic demand for vegetables is expected to continue strong in the year ahead. Into mid-1960 foreign demand for potatoes is expected to be somewhat stronger than a year earlier, largely because of a smaller crop in Canada. Exports of vegetables, though small relative to U. S. production, probably will be a little larger than last season. Drought damage to crops in Europe may result in some increase in U. S. exports of vegetables, particularly of processed items. Also foreign sales of fresh vegetables, most of which go to Canada, are likely to continue the uptrend of recent years. As usual, the quantity and quality of vegetables available will exert an important, and frequently a dominant influence on farm prices and income, and on consumer prices. Although for the longer term, the outlook for dry bean and pea exports is quite favorable, foreign markets are likely to take less of our dry beans and peas this season than last. Exports play an important part in the market situation for both of these items.

COMMERCIAL FRESH VEGETABLES

During the next 4 to 6 weeks supplies of vegetables for fresh market sale are expected to be somewhat smaller than a year earlier. Prices to growers are likely to average substantially above those in the late fall of 1958, and retail prices at least moderately higher.

In view of the variable weather in the months ahead and its effect on production, it is too early to say much about winter prospects. If weather permits, acreage of vegetables for winter harvest is likely to be near that of last winter. During the early part of the planting season excessive rains in Florida interrupted field operations, and damaged early plantings.

VEGETABLES FOR COMMERCIAL PROCESSING

Quantities of canned vegetables available for distribution into mid-1960 are close to the heavy supplies of a year earlier. Supplies of frozen vegetables are the second largest of record. An expected moderate reduction in the 1959 canned pack probably was about offset by substantially larger carryover stocks at the beginning of the season. Harvested acreage for processing was down only slightly from 1958, with considerable increases in sweet corn and snap beans largely offsetting substantial decreases in green peas, tomatoes, and cucumbers for pickles. According to reports in early October, estimated total production of 8 important vegetables for processing was down about 5 percent from 1958, but about a tenth above the recent 10-year average. Among major canned items, indications are that slightly to moderately more snap beans are available than last season, and substantially more corn. Because of heavier carryover stocks, supplies of tomatoes and tomato juice may be about as large as a year ago. Supplies of green peas are moderately smaller than the burdensome supplies of a year earlier, and most tomato products are probably smaller. Most other canned vegetables and all major frozen items promise to be in plentiful supply.

During the early part of the current season slow distributor demand and an attempt by some canners to increase movement resulted in a generally dull, weak market. F.o.b. prices of many items were below those of a year ago. Prices of most canned items probably have passed the low point for the season, and some moderate advances seem likely. However, supplies continue heavy. F.o.b. prices for the remainder of the season are expected to average the same to slightly above the moderate levels of a year earlier. Consumers will continue to find shelf prices attractive--though probably slightly to moderately higher than those of last season. The consumption rate for processed vegetables is expected to be maintained or increased slightly over 1959.

There is as yet no indication of the 1960 acreage of vegetables for commercial processing. Assuming yields near the average of recent years, however, it appears at this time that a slight to moderate cut in acreage may be needed to avoid the probability of burdensome supplies in the 1960-61 marketing season.

DRY BEANS AND PEAS

Overall supply of dry edible beans is slightly larger this season than last. Production by class of bean is not yet available. However, production by areas indicates that substantially less colored beans will be available than last season, and that colored classes as a group probably will be in tight supply. But the supply of white classes, mostly pea beans and great northern, is much larger than last year and above probable demand.

Domestic use of dry beans in the current season may be a little above the 14 3/4 million bags used in the 1958-59 season, but there is little prospect of any very substantial increase. Exports of dry beans

this season are expected to be above most recent years. However, with colored beans in tight supply, total exports are likely to be below the 4.0 million bag total for last season. The 1959 crop in Central and Northern Europe appears to have suffered some drought damage, but the crop probably turned out better than last year.

Prices received by U. S. growers for the various classes of beans will depend largely on the supply-demand situation for particular classes. Prices for large limas, and for colored classes as a group may average above those of last season. But with larger supplies of white beans and lower support rates, prices received by growers for white beans are expected to remain substantially below those of a year earlier. To avoid continued heavy supplies and low prices in the 1960-61 season, growers would do well to plant at least moderately less acreage to the white classes of dry beans in 1960.

Supplies of dry peas are a third larger than the light supplies of a year ago, and about a tenth above the 10-year average. Domestic use of dry peas in the current season is expected to be materially above that of last season, when use for food was down sharply. But indications are that Europe is not as short of peas this season as last. Thus, U. S. exports are likely to be substantially below the 1.5 million bags exported in the 1958-59 season.

Heavy supplies of peas are expected to keep domestic markets under pressure. During the early part of the season prices received by growers averaged about a third lower than in the early part of last season. Prices are expected to continue much below those of last season. To avoid the likelihood of a continued surplus in the 1960-61 season, growers next year should plant substantially less acreage than in 1959.

POTATOES AND SWEETPOTATOES

Before attempting to look ahead on potatoes, let's review quickly the situation during the last few months. During the winter of 1959 potatoes were in heavy supply. Stocks of potatoes on January 1, 1959 amounted to 107 million hundredweight compared with 91 million a year earlier. Despite heavy diversions of fall crop potatoes to starch and livestock feed, and a substantially smaller winter production, prices of potatoes remained at very low levels throughout the winter. By early spring the reduction of storage holdings to moderate levels and a 10 percent reduction in spring supplies resulted in a strong market. Prices received by growers moved up sharply, from an average of \$1.04 a hundredweight in March to \$3.76 in June. As movement from the summer and then the fall crop increased, prices dropped sharply--to \$1.62 a hundredweight in September--but remained well above the low levels for the corresponding months of 1958.

Now we come to the supply and price outlook for the months ahead. From the standpoint of growers, the outlook for potato prices during the next several months is considerably better than the very unfavorable

situation of a year earlier. Acreage of late summer and fall potatoes was only slightly smaller than in 1958, but weather was less favorable in many areas, and yields were down moderately. Production for late summer harvest was down 4 percent from 1958. Fall production at 167 million hundredweight was down 9 percent. Current supplies thus appear to be materially smaller than those of a year ago, but fully ample to maintain civilian consumption at year earlier levels. Growers in Florida and California in early September indicated intentions to plant a sixth less acreage than last year. Intended acreage was down 20 percent in Florida and 13 percent in California. Although yields may average above those of last winter, production on the intended acreage probably would be at least moderately below last year.

The geographic distribution of the fall crop is essentially the same as last year, with 35 percent in the East, 25 percent in the Central States and 40 percent in the Western States. Federal marketing agreements and orders remain in effect in States or in areas which produce about 70 percent of the fall volume. The purpose of the orders is to restrict marketings of tablestock potatoes to the more desirable qualities and preferred sizes, and to increase returns to growers.

With smaller total supplies of potatoes available, prices to growers through the winter are expected to average substantially above the low levels of a year earlier. Consumers too can expect somewhat higher price tags at the retail level.

Supplies of sweetpotatoes available in the current season are slightly larger than last season. Acreage was up slightly and yield was fractionally above the previous 1958 record. The 1959 crop of sweetpotatoes was estimated in early October at 18.0 million hundredweight, about 3 percent more than in 1958 but 8 percent below the 1949-57 average. Production was larger than last year in all producing sections except the Lower Atlantic area which was down moderately, and California which was about the same as in 1958.

The size and geographic distribution of the crop indicate that supplies of sweetpotatoes available for winter and spring markets are likely to be a little larger than those of a year earlier. Combined production in New Jersey, Virginia, North Carolina, Louisiana, Texas and California was moderately larger than last year, with material increases in Virginia and Texas and a moderate increase in Louisiana. These six States supply the bulk of winter and spring marketings.

During the early part of the season prices to growers averaged somewhat lower than a year earlier. Prices are expected to rise seasonally this winter and into spring, and probably will average close to those of a year earlier.

UNITED STATES DEPARTMENT OF AGRICULTURE
Agricultural Marketing Service

OUTLOOK FOR WHEAT IN 1960

Talk by Robert E. Post
Agricultural Economics Division
At the 37th Annual Agricultural Outlook Conference
Washington, D. C., 9:15 a.m., Wednesday, November 18, 1959

The wheat outlook for 1960-61 was discussed in the August issue of the Wheat Situation, which was issued prior to the seeding of the 1960 winter wheat crop. My remarks today will largely review the August statement. While there has been little changesince that time, I will elaborate on some of the more important points.

The Wheat Situation for 1959-60

The total U. S. wheat supply for the marketing year beginning July 1, 1959, estimated at 2,404 million bushels, an all-time record, is practically unchanged from the August report. It exceeds the previous peak last year by about 50 million bushels, or 2 percent, and the 1957-58 year by about 535 million bushels, or 28 percent. A sharp increase in the carryover from last year more than offsets a 24 percent reduction in this year's crop. The table on page 4 shows the items which make up the 1959-60 supply compared with earlier years. Distribution items are also shown.

Yields per harvested acre in 1959 of 21.0 bushels were below the all-time record of 27.3 bushels last year, but still the third largest of record. The 21.0 bushels this year is a sixth above the 1948-57 average of 18.0 bushels. Farmers harvested 53.2 million acres in 1959, only a third of a million acres less than in 1958. Production of 1,117 million bushels was a fourth less than the record crop in 1958 of 1,462 million bushels but still 4 percent above the 1948-57 average.

So much for supply. Domestic disappearance in 1959-60 is estimated to total about the same as the 629 million bushels last year. Exports are expected to total about 410 million bushels, somewhat smaller than the 443 million exported in 1958-59. On the basis of the estimates of supply and disappearance, the carryover July 1, 1960 would total about 1,365 million bushels. This would be 7 percent above the 1,279 million bushels July 1, 1959 and 55 percent above the 881 million on July 1, 1958.

Losses in United States exports are expected to be the greatest in sales to traditional dollar markets of Western Europe. Shipments under Government export programs, on the other hand, should hold to last year's level or even increase slightly.

Domestic prices continue to exceed world prices. Virtually all United States wheat exports require export payments. In the case of wheat grain these export payments are paid in grain; flour payments are still in cash. Shipments under export programs, to which I just referred, are in addition to these payments. The special Government programs, including sales for foreign currencies, barter and various donation programs, have materially increased the size of our exports. Of the total exports in 1958-59, 68.2 percent moved under these special programs; this was an increase over the 62.0 percent in the previous year and the 60.8 percent, the average of the past 5 years.

The principal factor expected to cause a reduction in U. S. exports this year is increased competition from other exporters. Australia and France have much more wheat available for export this year than last. Their wheats are similar in quality to those offered by the U. S. and their traditional outlets have also been important cash customers for U. S. wheat. A few exporting countries, such as Italy and Argentina, will have less to export this year than in 1958-59, but this will not be sufficient to offset the increased export availabilities that exist elsewhere.

Analysis of Wheat by Classes

This year, special attention has been given to supply and distribution by classes and prices by classes. The 4 great wheat producing areas of the United States were shown on a map in the Wheat Situation of April 1959. Hard red winter wheat is grown principally in the Southern Great Plains and hard red spring chiefly in the Northern Great Plains. These hard wheats are especially suited to the making of bread flours.

While most of you know the uses of the different classes of wheat, there might be some of you who are not familiar with the uses of the types of wheat grown in other than your immediate areas.

Soft red winter wheat is produced in the eastern half of the United States and white wheat predominates in the Pacific Northwest, with important districts also in Michigan, New York and California. Flours from soft red and soft white wheats are used in the making of pastry, crackers, biscuits and cakes. Durum wheat is grown principally in North Dakota and adjoining States. This type of wheat is used in the manufacture of macaroni, spaghetti, and similar products.

Carryover stocks of hard red winter wheat, which make up around three-quarters of the total United States carryover of wheat, increased sharply between July 1, 1958 and 1959. Of the total increases in the United States carryover of about 400 million bushels, 80 percent of the increase was in hard red winter. Stocks of hard red spring, white and soft red winter had moderate increases. Durum stocks decreased.

Analysis shows a further substantial increase in the prospective carryover of hard red winter wheat next July 1. On the other hand, indications are that there may be little or no change in the prospective carryover of soft red winter and moderate reductions in the prospective carryover stocks of hard red spring, durum and white wheats.

In order to show the relative magnitude of the July 1, 1959 carryover stocks of the various classes, let us compare the carryover of each with the 1954-58 average total disappearance (domestic and export). The carryover of hard red winter wheat is over twice its average disappearance, and that of hard red spring over a third larger than its average disappearance. Stocks of the other classes are less than their average disappearance; stocks of durum were nine-tenths of disappearance, those of white only a little over a third of disappearance and those of soft red winter only about a tenth of disappearance.

Hard red winter wheat supplies present the greatest problem, not because we do not use large quantities or export large quantities, rather because our production is so large. Of the total wheat consumed as food in the United States, 40 percent is hard red winter. Exports of hard red winter make up half of our total exports.

While the general level of wheat prices is related to the support level, the price of each class of wheat reflects its own supply and demand situation. The price of soft red winter wheat usually averages above the price of hard red winter, but large crops of soft red winter resulted in depressed prices of that type in 1952-55. The price of No. 1 Dark Northern Spring wheat at Minneapolis in the past 10 years averaged 9 cents above that of No. 2 Hard Winter at Kansas City. The price of white wheat at Portland was high relative to other markets in 1956 and 1957 as a result of the unusual export demand created largely by the P. L. 480 program at a time when dollar exports to Japan were large.

The Wheat Supply Outlook for 1960-61

With the minimum national allotment of 55 million acres in effect for 1960, it is estimated that a little more than 53 million acres may be harvested. In 1959, 53.2 million acres were harvested. Rainfall in the Great Plains has provided generous soil moisture supplies for the winter wheat crop, but at the same time has delayed seeding. Should the 1956-59 average yield of 22.6 bushels be obtained, a crop of about 1.2 billion bushels would be produced. A crop of this size would be about 8 percent larger than the 1959 crop and would again exceed domestic requirements and exports, resulting in a further increase in the carryover. With domestic disappearance and exports the same as those estimated for 1959-60 and allowing for small imports, the carryover July 1, 1961 would be increased by about 170 million bushels over the estimated carryover July 1, 1960.

The Price Situation and Outlook

Since harvest this year, wheat prices have been higher than usual relative to support levels. The strength this year reflects the large quantities withheld from the market and a crop that is smaller than last year. Because prices have risen to near or above the effective support level, further advances may be less than usual. Markets may display some temporary weakness at times. Farmers who have been withholding 1959 wheat from market because of large sales earlier in the year from the 1958 record production, may market in substantial quantities at the beginning of the new tax year.

Reflecting the market strength this year, U. S. prices to farmers in 1959-60 may average slightly higher than the \$1.72 for last year, even though the support price of \$1.81 is down 1 cent.

The "advance" minimum national average support price of \$1.77 per bushel for 1960-crop wheat was announced on July 8. The average support price for the 1959 crop was \$1.81 and for 1958-crop wheat, \$1.82. The \$1.77 per-bushel minimum average support for 1960-crop wheat is based on the July 1959 modernized parity price of \$2.36 per bushel (announced June 30). This "advance" minimum price will not be reduced but could be raised if the parity price at the beginning of the 1960 marketing year is higher.

Wheat: Supply and distribution, United States,
1953-58 and 1959 projected

Item	Year beginning July						
	1953	1954	1955	1956	1957	1958	1959
	<u>1/</u>	<u>2/</u>					
	Mil. <u>bu.</u>	Mil. <u>bu.</u>	Mil. <u>bu.</u>	Mil. <u>bu.</u>	Mil. <u>bu.</u>	Mil. <u>bu.</u>	Mil. <u>bu.</u>
<u>Supply</u>							
Carryover on							
July 1	605.5	933.5	1,036.2	1,033.4	908.8	881.0	1,279
Production	1,173.1	983.9	934.7	1,004.3	950.7	1,462.2	1,117
Imports <u>3/</u>	5.5	4.2	9.9	7.8	10.9	7.8	8
Total	1,784.1	1,921.6	1,980.8	2,045.5	1,870.4	2,351.0	2,404
<u>Domestic disap-</u>							
<u>pearance</u>							
Food <u>4/</u>	487.1	485.9	481.5	482.4	483.7	492.5	500
Seed	69.5	64.8	67.7	57.7	63.2	65.6	66
Industry	.2	.2	.7	.5	.3	.1	---
Feed <u>5/</u>	76.8	60.1	51.2	46.6	39.3	71.2	63
Total	633.6	611.0	601.1	587.2	586.5	629.4	629
<u>Exports</u> <u>6/</u>	217.0	274.4	346.3	549.5	402.9	443.0	410
Total disap-							
pearance	850.6	885.4	947.4	1,136.7	989.4	1,072.4	1,039
<u>Stocks on</u>							
<u>June 30</u>	933.5	1,036.2	1,033.4	908.8	881.0	1,278.6	1,365

1/ Preliminary. 2/ Projected. 3/ Excludes imports of wheat for milling in bond and export as flour. 4/ Includes shipments to United States Territories and military food use at home and abroad. 5/ This is the residual figure, after all other disappearance is accounted for. 6/ Actual exports. Prior to October 1954 they included those for civilian feeding under the military supply program.

OUTLOOK FOR WORLD TRADE IN RICE
IN 1960

Prepared for the 37th Annual Agricultural Outlook Conference

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by

Dexter V. Rivenburgh, Rice Marketing Specialist, Foreign Agricultural Service

PRODUCTION

World production of rice for 1959/60 will continue a rather strong upward movement for the second consecutive year and for the third time in the past four years compared to average annual production for the 1950-1955 period. The increase this year will be largely centered in the free world with Communist China rice production likely to be down from last year's levels. This reverses somewhat the pattern of 1958/59 when a substantial portion of that year's increase occurred within Communist China. The situation, however, is not one that at this time would necessarily point to any immediate danger of creating unmanageable stocks of rice in the hands of major exporting countries.

INTERNATIONAL TRADE

The volume of international trade in 1959 will likely show a decrease over that of 1958. This will result from several factors. Domestic production in large importing countries was high and in several instances of record proportions. This resulted in a reduction of imports particularly in the lower ranges of quality. The volume of trade for the first half of 1959 was lower than it has been for several marketing years but shipments were accelerated in the second half. The exact extent of the recovery is not known as yet but it is unlikely that it will be sufficient to offset losses earlier in the year. Egypt, Brazil, Argentina, Uruguay and Madagascar were without export supplies after July 1, and some had to import rice for domestic consumption. The limitation of supplies from these sources held down the volume of trade in the last part of 1959.

The third factor that is likely to cause trade to fall below 1958, is the failure of Communist China to export rice in amounts comparable to 1958. The reasons for lower supplies are likely to be economic in character including lowered production because of weather conditions, internal transport and domestic requirements.

For the major exporters, Thailand sales, while holding well for average to good grades, have been slow throughout the year for broken and for rice of qualities requiring reprocessing. This is apparently due to high levels of production in Asian areas being reflected in lower imports of low grade rice.

Burma exports, while lagging behind last year's for the first seven months of the year, moved above last year's levels by the end of September. Several large sales made at that time may tend to hold exports up through the end of the year. Burma's sales have been principally in the form of government contracts without too great fluctuations in price.

Egyptian export supplies were materially down as a result of water shortage for the 1958 crop. Supplies from the 1959 crop available after November 1 probably will not appreciably raise total exports for the year.

Shipments from Vietnam, British Guiana, and Italy were over those of 1958 and about the same from Taiwan.

CONSUMPTION

Per capita consumption of rice continued to rise. According to FAO estimates, it now averages about 15 percent higher than the average per capita consumption for 1948/52. Should this prove to be the case, total consumption has risen faster than population in the past decade. Increases in consumption have been generally distributed throughout the world, but are particularly evident in countries of Asia, Communist China, the Near East and Africa. Central and South America were about constant with a slight decrease noted in the case of Cuba.

STOCKS

Stocks of rice in exporters' hands from other than the 1959/60 crop as of January 1960 are not expected to be materially higher than those of last year which were the lowest of several years. There will be some build-up in the case of Burma but carryover stocks in Thailand, Vietnam, Cambodia and Taiwan will be near last year's levels. Carryover stocks will be materially down or non-existent in the case of Egypt, Italy, Spain, Madagascar, Argentina, Brazil and Communist China. By varieties, the carryover stock position will be the best for short grains with old surplus supplies limited to medium and long grain types.

The 1960 rice trade is likely, therefore, to follow somewhat the 1959 pattern, with supplies being drawn from working stocks and current production and only a relatively small amount coming from accumulations from previous crops. This will, to some extent, tend to limit any abrupt rise in burdensome surplus stocks in the coming year. There may be some exceptions to this in individual countries but these will not likely affect the overall market too strongly.

PRICES

Prices on the better grades of Asian rice had made some advances by June this year compared to closing prices at the end of 1958 but in most instances were lower by November 1. The exception was for long grain varieties; based on f.o.b. prices, long grain, 5 percent broken averaged \$5.90 a cwt., on January 1, 1959, \$6.25 in June, and held fairly well at that figure; long grain,

15 percent broken opened at about \$5.65 moved up to \$6.00 and then declined to \$5.70. Medium grain varieties from Asia were at about \$4.27 for grades with 40-42 percent broken as of January 1, 1959. Prices remained fairly steady on government contracts for most of the year but in November were reported to be down to \$4.00. Short grain varieties prices generally were erratic throughout the year due to almost a cessation of Egyptian exports, a cut-off of Italian supplies in mid-summer and smaller offerings of Communist China rice. Prices of grades with 5 percent broken were moving European destination at the beginning of 1959 at \$6.90 and were quoted as high as \$7.60 at mid-year reflecting scarcity of Mediterranean supplies.

Broken f.o.b. Asian ports opened at an average of \$4.15; June prices declined to \$3.45 while on November 1 prices had further declined to \$3.25. In general, broken showed a decline of 90 cents.

Prices for 1960 are likely to hold within reasonable limits for higher qualities of long and medium grains while grades with 20 to 40 percent broken are likely to move around present prices or lower. Larger quantities of short grains in the market are likely to narrow price ranges between other types and short grain compared to 1959.

REQUIREMENTS

Based on the anticipated level of 1959/60 world production, it is quite likely that the requirements of some major importers may be affected in 1960 similar to the situation in 1959. High levels of production in these areas will continue to reduce demands for lower grades of rice and broken. In the Far East, Philippine imports are unlikely for most of the year and a further reduction is likely to occur in the case of Japan. The area of heavy imports is likely to be Indonesia, Malaya, Ceylon and India. Pakistan may not need as much rice as was the case for a series of years. However, as both Pakistan and India suffered damage from unfavorable weather, it is not possible as yet to fully assess the situation. Requirements for the Middle East, Europe and Africa are likely to remain steady or even strengthen slightly despite improved local production outlook. Western Hemisphere requirements will probably remain fairly constant.

OUTLOOK FOR THE U.S.

The level of rice production throughout the world is not necessarily a direct measurement of the opportunity that the U.S. rice industry may have to market rice. The portion of high quality rice produced in the world is relatively small and demand is not affected as much as is the case for lower qualities. Exports from the United States were higher for the 1958/59 rice marketing year notwithstanding the fact that Title I sales under P.L. 480 were substantially lower than had been the case for several years. The principal factor resulting in this increase in dollar commercial sales was the inauguration of the Payment-in-Kind program on December 15, 1958. Under this program United States has been moving rice to European, Middle East, African and Western Hemisphere destinations at prices more competitive with world trade than have been the case in a number of years. The 1959/60 rice marketing year will have

the benefit of this type of program from the beginning of the season on August 1st. This should be reflected in increased commercial sales for the current year. Title I sales for foreign currencies should also be above last year's levels. These two factors may result in an increase in total exports. There has been a considerable amount of promotional work done by the rice industry as a whole in Europe and to a more limited extent in Africa. This together with improved marketing conditions as a result of exhibits at International Food Fairs in Europe and other market development activities should be a factor in holding up and reasonably increasing the levels of rice exports of 1958/59.

UNITED STATES DEPARTMENT OF AGRICULTURE
Agricultural Research Service
Institute of Home Economics

PATTERNS OF USE OF CONSUMER INSTALLMENT CREDIT

By Emma G. Holmes, Family Economist

There is much to be learned from facts and figures about the use of credit by consumers in the past, that can be helpful in deciding when, what, and whom to teach about credit. We have such facts and figures in the Federal Reserve Board's periodic estimates of amounts of credit extended and debts repaid and outstanding; its annual studies of consumer finances; and its 1956 study of installment credit. Data from these sources reveal trends and relationships that have followed fairly definite patterns over time. It is these trends and relationships that I refer to as "patterns of use" of consumer installment credit. In confining the discussion to installment credit we exclude noninstallment types of credit like regular charge accounts, service credit, and single-payment loans, as well as mortgage credit for home purchase.

Longtime trend is up.--The longtime trend in amount of installment credit in use, both in terms of credit extended and debt outstanding, is upward. The monthly average of total installment debt outstanding was \$2.9 billion in 1929 (chart 1). The monthly average for January-July 1959 was \$35 billion. A large part of the increase is due to larger population and higher price levels, of course. But even with the effect of these changes eliminated the trend is upward. In terms of 1958 dollars per capita, the average installment debt outstanding was \$41 in 1929 and \$195 in the first 7 months of 1959 (chart 2). The increase of \$154 per person can be attributed to the higher proportion of consumers using installment credit in 1959, the purchase on credit of more goods or more expensive goods, and changes in the structure of consumer credit itself.

One of these changes in credit as an institution, that caused installment debt to rise, was a gradual substitution of installment for some of the noninstallment consumer credit. In 1929, installment debt was about half of the short- and intermediate-term consumer debt outstanding. Now it is approximately three-fourths of the total, and has been at this level since the early 1950's. Another change is the lengthening of the repayment period for installment debts. Permitting smaller monthly payments, spread over a longer time, made outstanding debt pile up fast.

Installment debt rises in "good times"--More installment credit is used when the economic outlook is good than when it is less promising.

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In general, you can expect installment buying to be high when jobs are plentiful, incomes are good, many new homes are being built, and durable goods--especially cars--are selling well. But in times of uncertainty people not only may have more trouble establishing credit, but hesitate to obligate themselves for future payments. The amount of installment credit extended to consumers dropped during the deep depression of the early 1930's and the smaller one of 1937-38. It dropped again in the early 1940's, but this time due to wartime credit controls and scarcity of durable goods. The minor recessions of 1954 and 1957-58 acted as brakes on the upward climb of credit extended to consumers (chart 3).

Installment debt rises when purchase of durables is high.--Use of installment credit is closely related to purchase of consumer durables. The earliest known installment selling in this country is said to have been done by retailers of furniture. Mass production and selling of automobiles and rapid expansion in use of installment credit went together. Nowadays, automobile debt represents a good share of total installment debt--about two-fifths of it at the present time, even though car buying has been relatively slow for a while. According to the Federal Reserve studies, about 60 percent of car buyers in recent years paid for them in installments. A large proportion of the household furniture and appliances bought are paid for in installments, too. Installment credit has been an important factor in the American family's accumulation of durables.

Installment debts climbed fast in the late 1940's when consumers were catching up on the buying of durables they had not been able to get during the war. Debt also rose sharply in 1955, a record year for car buying on credit terms that had recently been liberalized. Car buying slumped after 1955, and installment debt increased at a more modest rate even though income was still rising.

Rising incomes have made it possible for more and more people to include such durables as automobiles, automatic washers, and television sets in their level of living. Eleven percent of the disposable income of consumers went for durable goods in 1929. The ratio dropped during the depression of the 1930's, returned to 11 percent in 1947, averaged about 12 percent from then until 1955 when it reached 13 percent. Changes in installment debt coincide with these changing ratios of income for durables.

The use of credit varies seasonally.--Data on installment credit extended to consumers over the past 9 years shows that people take on more installment debt in December than in any other month (chart 4). A smaller peak of installment debt comes about the middle of the year--in May to July. The low point is early in the year--usually in January and February, when people are recovering from Christmas shopping.

The December peaking of installment credit is largely due to debt assumed for the group of items classed as "other consumer goods." These include such things as household appliances and furniture, jewelry, and nondurables, but exclude automobiles. In other words, these "other

consumer goods" are the types of things that are frequently bought for use as Christmas gifts. Automobiles usually figure somewhat less heavily than other consumer goods in the December total, but they contribute substantially to the midyear peak. Personal cash installment loans rise in December. Possibly cash is being borrowed to buy Christmas presents, too, or to pay up old bills before the end of the year.

Payments on outstanding debts tend to lag behind credit extended.-- Consumers as a group usually pay less on existing installment debts than they borrow or buy on new installment credit during a given month (chart 4). An exception occurs during times of depression or recession, when people are avoiding new commitments but continuing to make payments on their old debts. Another exception is during the first month or two of the calendar year, when consumers are easing up on credit buying. Payments on automobile debts exceeded new credit assumed during most of 1958, because people weren't buying as many cars as usual.

Chart 5 shows net changes in total outstanding installment debt each month since 1952. When the amount of credit extended to consumers is more than the amount they repay on debts during the month, there is a net increase in the outstanding debt. When consumers repay more than they receive in new credits, a net decrease occurs. In the charts, each vertical line extending above the horizontal line means that new debts exceeded repayments on old ones in the given month, increasing the outstanding debt by the amount shown. Each line extending below indicates that repayments exceeded new debts, so that outstanding debt fell. The fact that a net increase occurs much more frequently than a net decrease explains the persistent upward trend in installment debt outstanding. In the case of cash installment loans, a net increase occurred in every month but 2 between 1952 and July 1959.

At the present time repayments on installment debts amount to about 13 percent of U. S. personal disposable income. In 1929, they were 6.5 percent, reached 9.5 percent in 1940 and 1941, and have been increasing year by year since 1945.

More people are using installment credit.--The proportion of spending units with installment debt is increasing. According to Federal Reserve studies, the proportion of U. S. spending units with installment debt was 22 percent in 1949, 45 percent in 1956, and 48 percent early in 1959.

Those in middle income group use credit most.--People in the middle-to upper-middle-income group are the ones most likely to be users of installment credit. The peak early this year was among the spending units with between \$6,000 and \$7,500 income, where 63 percent had installment debt (chart 6). The proportion wasn't much lower than this in other income groups between \$4,000 and \$10,000, but it dropped at both lower and higher income levels--to 23 percent of the group with less than \$1,000 and 38 percent of the group with \$10,000 or more. This pattern of extensive use of credit by the middle income spending units, but less use by spending units at low and high income levels shows up in various studies made over the years. But the proportion using installment credit at each income level has shifted gradually upward.

The wages or salary of a working wife frequently raise the family income to the range where installment debts are common. Studies show that families with working wives are somewhat more likely to have installment debt than those without this second income. Another income-related factor that may influence people to use credit freely is the increased sense of security fostered by Social Security and related programs. By taking some of the uncertainty out of the future these make people more willing to spend and incur debt in the present.

Installment buying changes with family cycle.--The tendency to buy on the installment plan changes as families progress through the stages of the family life cycle. You will do well to direct your credit programs to young families especially, and those with children growing up. Federal Reserve's 1959 Survey of Consumer Finances shows that the spending units headed by persons between 25 and 34 years old were more likely to have installment debt than the younger or the older ones. Sixty-nine percent of these young families reported such debt early this year (chart 7). The proportion of spending units with heads 18 to 24 and 35 to 44 years old with installment debt was about 60 percent. In the groups where the head was over 45 the proportion with debt decreased quite rapidly, to a low of 16 percent of the 65-and-over group. This older group includes a considerable number of people with low incomes, whom we have described previously as low in the use of installment credit.

Credit use varies with place of residence.--Suburban families tend to use installment credit more than either city or rural families. It's easy to find the reason for generous installment buying by suburban families, for they are likely to be young families with children, owners of homes with need for household furnishings and equipment, power lawnmowers, etc., and requiring one or more automobiles. There are regional differences, too, related in part to the composition of the population. Negro families are more likely than white families to be users of installment credit.

Installment buying increases with easing of terms.--Use of installment credit increases when credit terms are relaxed--that is, when smaller downpayments are permitted or monthly payments are reduced by increasing the length of the repayment period. The usual terms for a purchase of considerable size, such as an automobile, used to include a substantial downpayment and repayment to be completed in 12 months. Downpayments have been reduced, and the time allowed for repayment has gradually increased. By 1954, the average maturity on installment contracts for new cars was about 24 months; in 1955 it was 28 months, and in 1956, 36 months. Easier terms persuade some to buy on credit who would not otherwise do so. They also encourage some who would ordinarily have bought cheaper cars or equipment to "trade up" to more expensive models.

Although changing the downpayment or the monthly payment affects the amount of installment debt assumed by consumers, a change in the interest rate doesn't seem to. Few installment buyers pay enough attention to credit charges to know what the rate of interest is. The size of the monthly payment concerns them most, and since an increase in the interest rate makes relatively little difference in the monthly payment, it doesn't worry them.

In 1952, credit controls enforced during the Korean conflict were relaxed, and regulation of downpayments was discontinued. The subsequent increase in buying of household durables reflected this action, as well as the increased availability of such goods on the market as the economy returned to peacetime status.

Debt rises as opportunities to use credit increase.--Still another factor in the increase of consumer installment debt is the extension of credit for an ever-increasing number and variety of consumer goods and services by an ever-increasing number and variety of agencies. Advertising of all kinds carries word to consumers of the many credit opportunities available to them through both old and new kinds of credit plans.

What's ahead.--If the various trends and relationships we have been discussing continue, it seems likely that use of installment credit will continue at a high level. With incomes moving upward year after year, raising standards of living, we can look for relatively more people to be doing installment buying. The generally relaxed attitude toward installment credit for all purposes encourages many to try it.

It seems likely that the importance of installment credit relative to noninstallment credit will increase as new plans for buying "on time" are devised and put into operation. Consumer acceptance of innovations and new models in durable goods will have much to do with credit totals. Acceptance of the new small cars is expected to be a big factor next year.

Some who are concerned about the rising total of installment debt have suggested that the Government check it by imposing credit controls similar to those in force during World War II and the Korean conflict. Except in case of a similar emergency, however, it seems unlikely that this would be done in the near future. Consumers themselves will be responsible for deciding how much installment debt they can handle, and guiding their installment buying accordingly.

Sources:

Federal Reserve Board. Consumer Instalment Credit, Part I, Vol. 1 and 2, Part II, Vol. 1
Reports of Survey of Consumer Finances. Federal Reserve Bulletin, Jan. 1950, July 1956, July 1959
Estimates of Consumer Credit. Federal Reserve Bulletin, April 1953, Jan. 1954, June 1955, Oct. 1956, Dec. 1957, Nov. 1958, March, Sept. 1959

Cox, Reavis. The Economics of Instalment Buying. New York, The Ronald Press, 1948.

Kisselgoff, A. L. Factors Affecting Demand for Consumer Installment Sales Credit. Nat'l. Bureau Econ. Research Tech. paper No. 7, 1952.

Chart 1.--CONSUMER DEBT OUTSTANDING

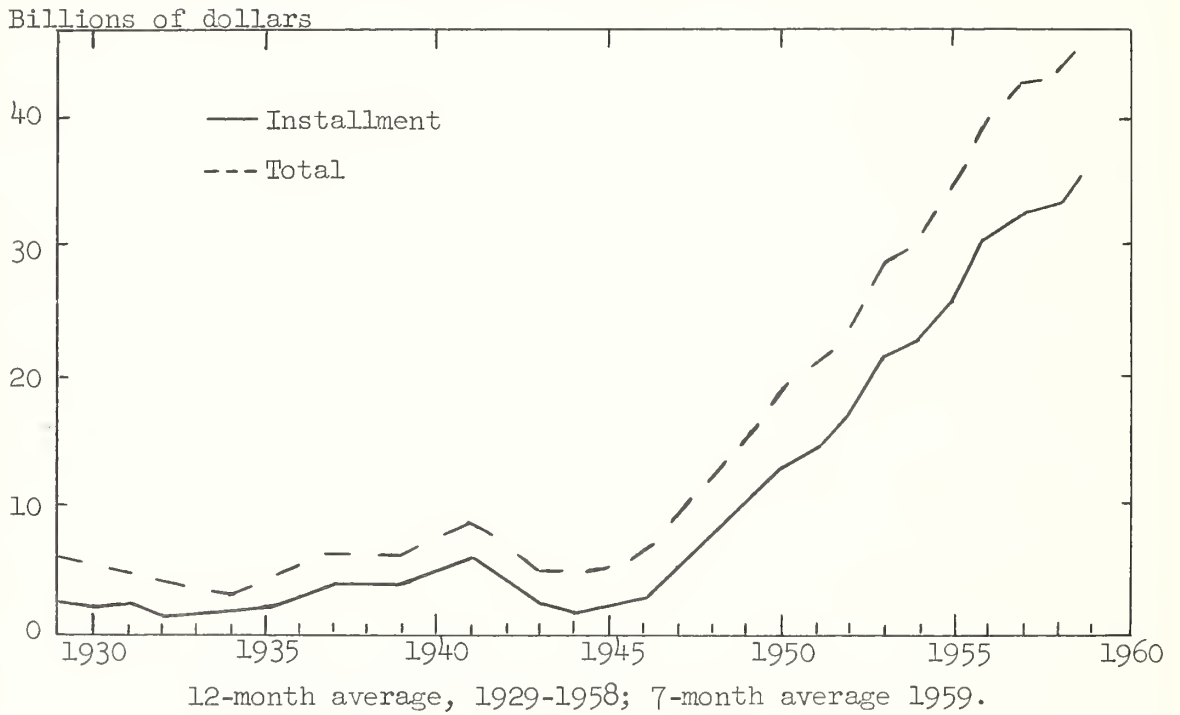
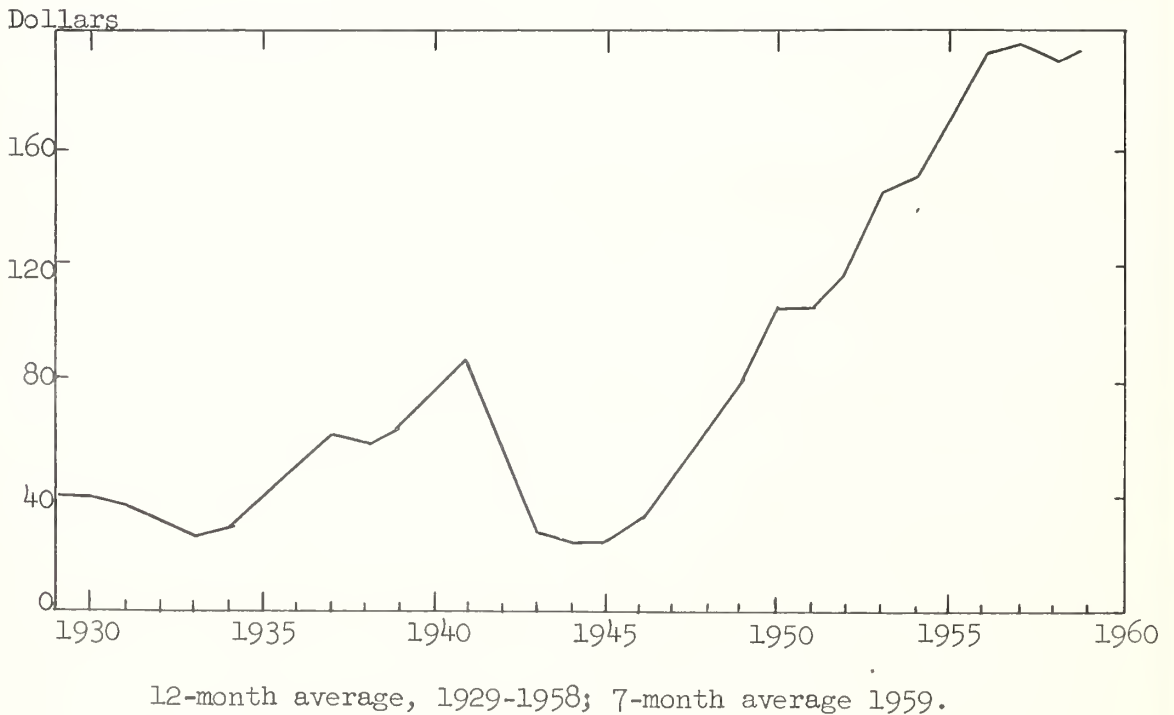


Chart 2.--INSTALLMENT DEBT OUTSTANDING
Per Capita in 1958 Dollars



Data from Federal Reserve Board.

Chart 3.--INSTALLMENT CREDIT EXTENDED

Billions of dollars

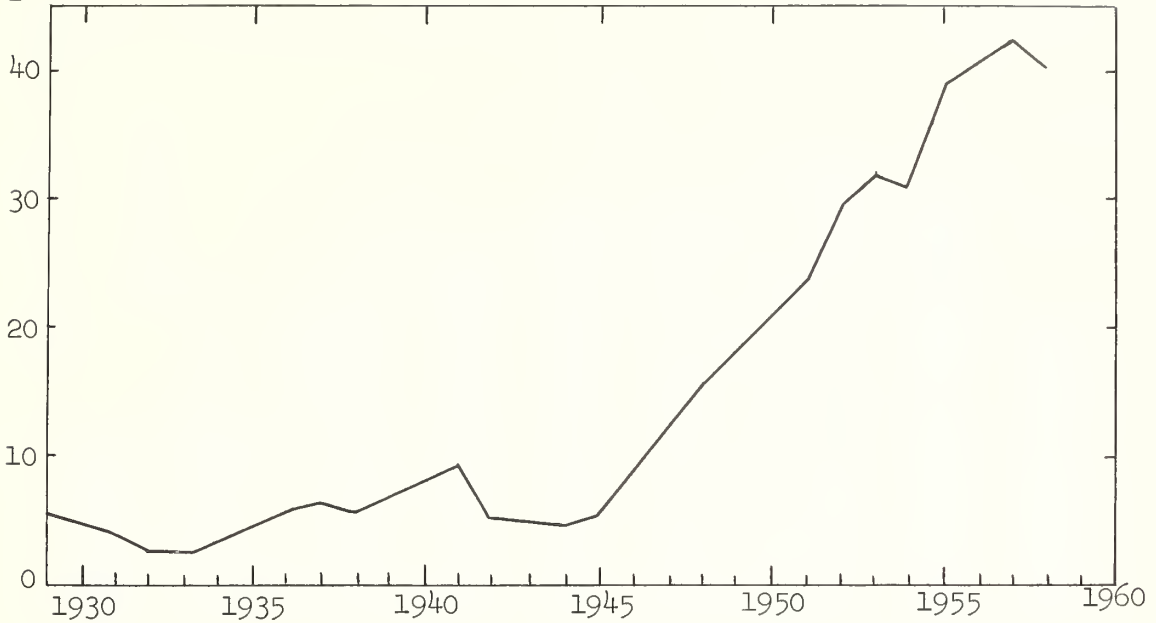
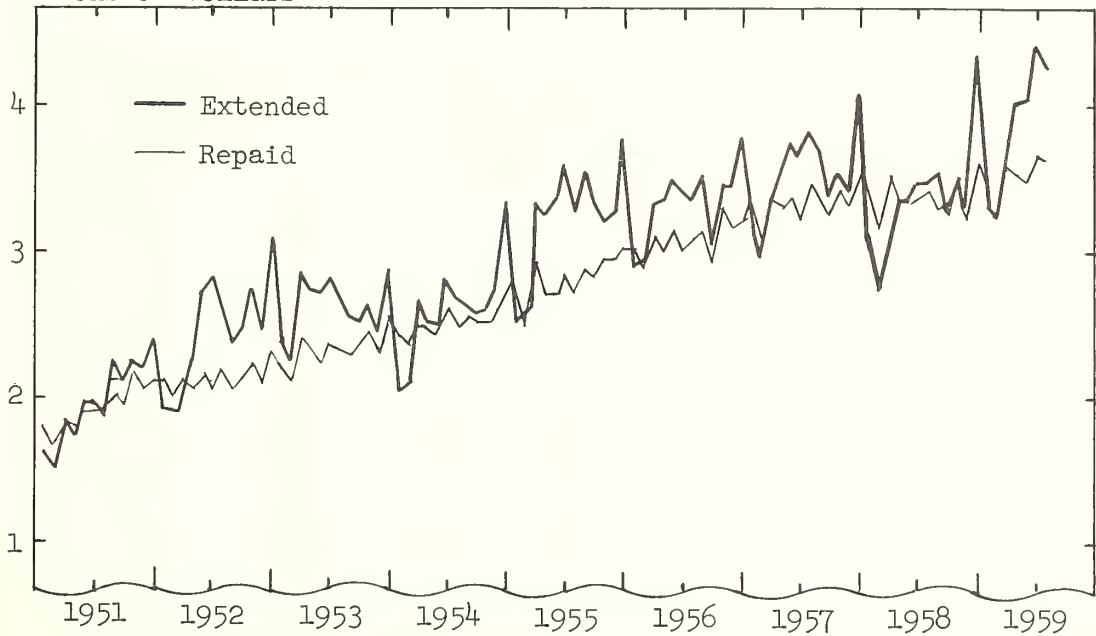


Chart 4.--INSTALLMENT CREDIT EXTENDED AND DEBT REPAYED

Billions of dollars

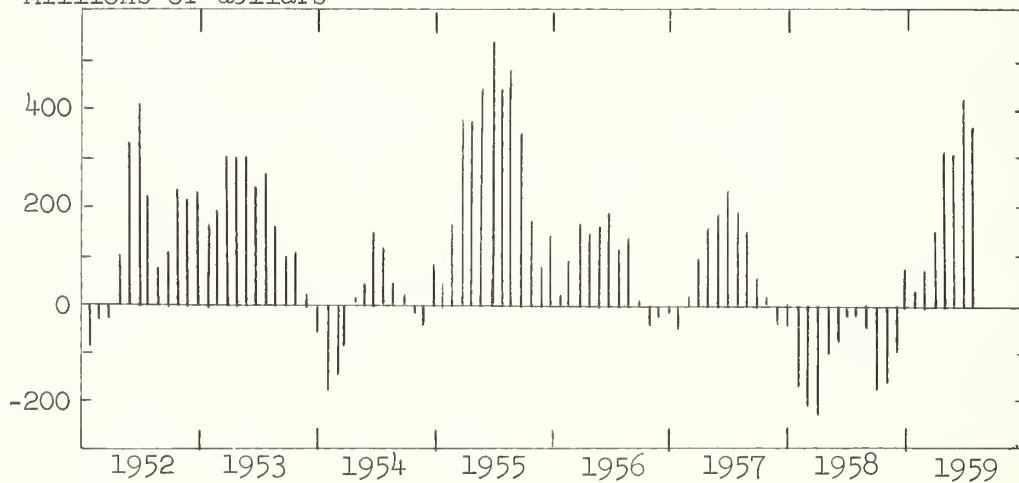


Data from Federal Reserve Board.

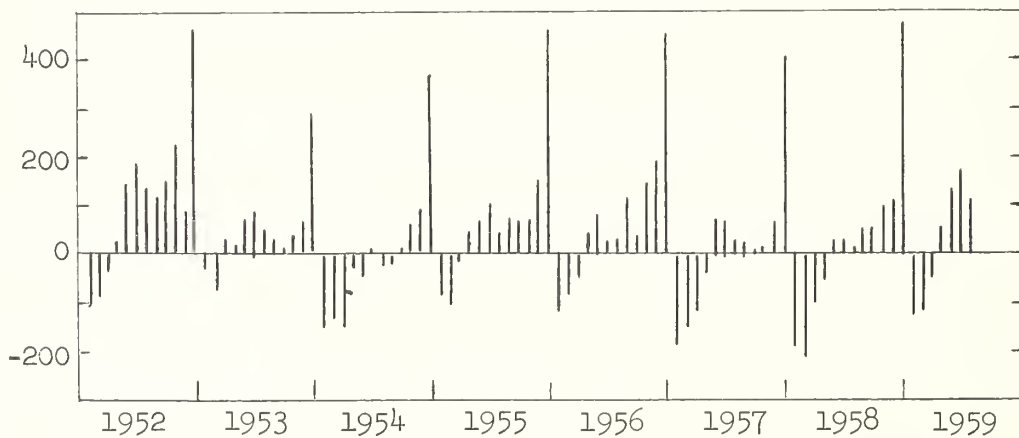
Chart 5.--MONTHLY NET CHANGE IN INSTALLMENT DEBT, BY TYPE

A. Automobiles

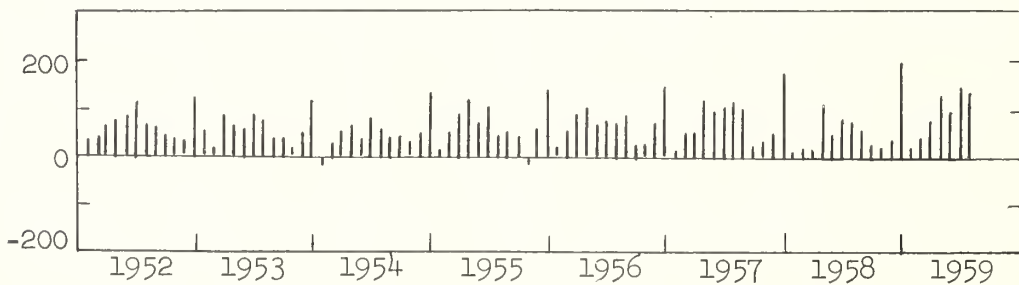
Millions of dollars



B. Other consumer goods



C. Personal cash loans



Data from Federal Reserve Board.

Chart 6.--PERCENT OF SPENDING UNITS WITH INSTALLMENT DEBT,
EARLY 1959, BY INCOME

Percent

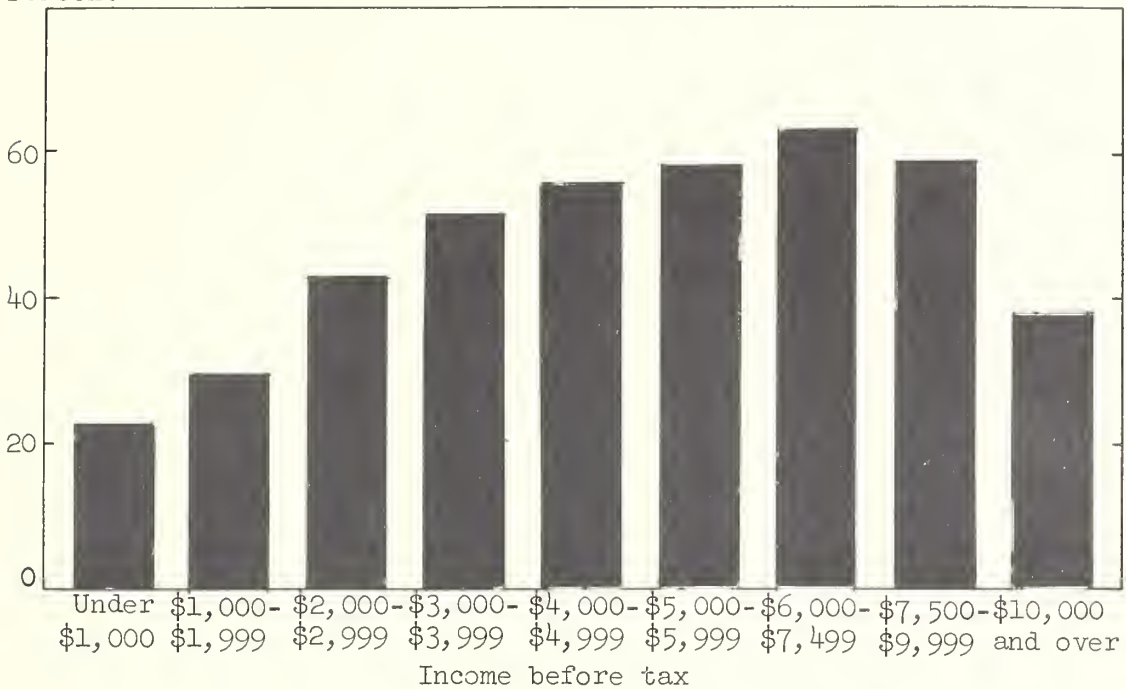
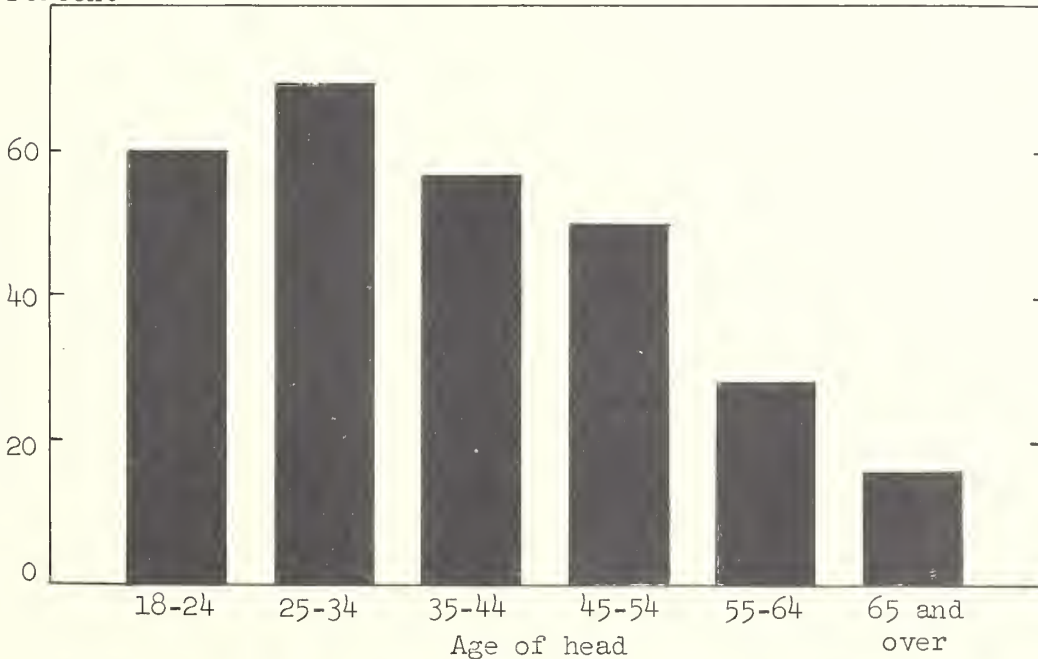


Chart 7.--PERCENT OF SPENDING UNITS WITH INSTALLMENT DEBT,
EARLY 1959, BY AGE OF HEAD

Percent



Data from Federal Reserve Board.

UNITED STATES DEPARTMENT OF AGRICULTURE

PROBLEMS AFFECTING AGRICULTURAL TRADE

by Clarence L. Miller
Assistant Secretary for Marketing
and Foreign Agriculture

This is another good export year. We expect the volume of U.S. agricultural products exported during the 1959-60 year to be the second highest in history.

You have all heard a lot about the special Government export programs, especially Public Law 480, but to keep the record straight we should note that two-thirds of this year's agricultural exports are expected to be commercial sales for dollars.

When Public Law 480 was enacted in 1954, some people were fearful that its special features -- i.e., sales for foreign currencies, barter, and donations -- might cut into and seriously displace our regular commercial exports for dollars. A high degree of caution has been exercised to try to prevent this from happening. I think the results speak for themselves. In 1954-55, our exports of farm products for dollars were valued at \$2.3 billion; this year we expect a value of \$2.7 billion.

I mention this matter of protecting and expanding dollar exports because it is our foremost export objective. It has been said many times, but bears repeating, that our basic purpose must be, and is, to use the special export programs only as a temporary bridge between our abundant supplies and the great number of consumers in less developed countries who lack dollar finances. The permanent commercial bridge will come as these people forge ahead, build up their industry and commerce, and become active cash customers.

Given at the 37th Annual Outlook Conference, U.S. Department of Agriculture, Washington, D.C., November 16, 1959, 2 p.m.

We should not overlook the potential dollar market that these emerging nations represent. Today most of our dollar sales of agricultural exports go to the one-third of the world's people who live in the industrialized countries. Although substantial exports also go to the remaining two-thirds of the world's people, a comparatively small part is sold for dollars. But these people, who are nearly two billion in number, represent a potential market so vast as to stagger the imagination. In the years ahead, one of the big marketing challenges will be how to work with such nations so as to help them develop, emerge, and become real customers with real ability to buy.

The subject assigned to me is "Problems Affecting Agricultural Trade." I find five specific problems that agricultural people have to cope with as they participate in world marketing, and this matter of ability to buy is only one of them. As prologue to discussing these five specific issues, however, I want to mention one general, overriding problem, one that is largely psychological. It is the fact that American agriculture, by and large, is not export-minded. I think we need to recognize this fact because it has much bearing on how we try to meet the five specific export problems.

There are some reasons why we as a nation are not especially export-minded. The main one is that nine-tenths of our farm production stays at home, feeding and clothing our own people. Our big emphasis is on servicing our big, remunerative, and stable home market. We tend to look on the foreign market -- which takes one-tenth of our farm production -- as a disposal outlet.

There are some exceptions to this general statement, and to some extent these include our tobacco, cotton, and fruit industries. Our tobacco and cotton growers have been exporting since Colonial times and have always had an awareness of the

foreign market. Our fruit people, too, have been exporting for a long time; in fact, some segments of our fruit industry were largely built to service the foreign market. Nevertheless, outside of these industries -- and sometimes within them -- there is not always a full appreciation of the importance of foreign consumers.

The actual importance of the foreign market is apparent in the export statistics. For some commodities, it is not one-tenth but a substantial part of our production that is exported. This is a big help in relieving supply pressures and an important source of farm income. Based on the last three year average, our exports are the equivalent of about half of our cotton and rice crops, two fifths of our wheat and tallow production; and about one-third of our tobacco and soybeans (including the bean equivalent of soybean oil).

Any successful merchant knows that he cannot set up his merchandising system to serve only part of his customers. The overlooked customers can mean the difference between profit and loss.

In contrast to our own approach, we find countries like Denmark which exports two-thirds of its food production and has built large parts of its agriculture specifically to service foreign markets. A reputation for quality products has carefully been built, and export standards are enforced to protect that reputation. Many of our competitors are similarly export-minded -- Canada with its wheat, New Zealand with its dairy products, South Africa and Israel with their citrus, and others that we could name.

These facts are mentioned not in criticism but as something to be recognized as we face up to our broad problems of exporting. Foreign competition is increasing. Foreign customers have become more demanding. If American agriculture is to retain and expand its foreign markets, it will need to give its foreign

buyers a quality of service equal to that traditionally given to buyers here at home.

Fortunately, considerable progress is being made in this direction. Although there's still a long way to go, many U.S. agricultural trade groups are making a more determined effort than ever before to tailor their products and services to foreign needs. Every major U.S. agricultural commodity group is involved to some extent in foreign market development. They are carrying out a wide variety of foreign marketing projects, including studies and promotions, broadly similar to the familiar approaches to our home market. In this work, the Department is pleased that it can be a partner, using finances made available under the Public Law 480 program. Indicating the extent of this activity, 317 such projects have been undertaken in 39 countries since the joint foreign market development activity got under way in 1955.

After this rather lengthy prologue, I would now like to get down to the five basic problems that affect international trade in agricultural products. I have listed them as (1) Availability of Product, (2) Price, (3) Means to Buy, (4) Quality, and (5) Trade Restrictions. All of these are interrelated, all need to be tackled together.

Availability of Product.

It is a truism, of course, that the first problem in exporting is to have something to export. One of the difficulties of the underdeveloped countries is that they lack the excess productive capacity that enables them to participate extensively in world trade, or where they do export they supply only a limited range of goods and commodities, thereby being highly vulnerable to changes in demand.

We are generally fortunate in this regard, as shown by the fact that the United States not only is the world's largest exporter of agricultural products but also we export the widest variety. In the broad sense, we have little supply problem for those commodities that we export in greatest volume -- grains, cotton, tobacco, fats and oils, citrus, etc. The supply problem is most frequent for some of the commodities that we export in limited volume, and the one that currently comes to mind is dairy products. In recent years, we have been in and out of the world market with respect to some of the dairy products, which is not the way that you build a permanent market. At the moment, there is little butter, cheese, or non-fat dried milk available for export. If it is our intention to build a solid market overseas for our dairy products, this matter of continuity of supply is something that we need to consider seriously.

Ample supplies are a good thing for us to have; however, when foreign producers have them, it means competition. Of the 15 principal kinds of farm commodities that we export, foreign producers have been expanding their production of them even more rapidly than we have. From 1950 to 1958 foreign production of competitive commodities increased 36 percent, whereas our own production of such commodities increased 26 percent. By comparison, world population during this period increased 14 percent.

Some dips show up occasionally in the foreign production curve, mainly due to weather, and when they do there's more opportunity for our own supplies to move out. A current example is the expected increased demand for livestock feeds in Europe, due to drought hurting pastures and fodder crops. But by and large, the world agricultural supply situation is greatly expanded and we face real competition in today's buyers' markets.

Price.

Another obvious requirement in world trade is to be competitive in price. This doesn't signify cutting prices under those of the other fellow. Price-cutting doesn't necessarily give any advantage for many countries depend so heavily on exports as a source of revenue that they are forced to meet any and all prices. The main problem is to price our products so as to be on equal footing.

By and large, the most solid trade is based on price competition arising out of law of supply and demand. We have a long list of commodities that we sell in the world market in which our price is fully competitive -- soybeans, vegetable oils, lard, tallow, variety meats, poultry, fruits, and others. Due to the price support program on some other commodities, in some instances our domestic prices are above world prices and we are able to meet world prices only through export subsidy payments. Currently we are paying 8 cents a pound on cotton and 50 to 60 cents a bushel on all wheat exported. The fact that we expect to export about twice as much cotton this year as we did last year is due in part to a new program which makes U.S. cotton prices more fully competitive with foreign growths, as well as to the ending of a worldwide textile recession.

Export subsidies, however, are not the preferred answer to meeting competition. We are in the strongest position when our industry competes on a basis of efficiency. As a matter of fact, over three-fifths of our dollar exports of farm products are moving without any subsidy.

But this matter of price is something with which you are thoroughly familiar and I don't need to dwell on it further. I'd like to move on to the question of buying power.

Means to Buy

Another rather obvious fact is that you can't sell to a foreign consumer unless

he has the means to buy. Our best foreign customers are in the countries that are in the best foreign exchange position -- and these are mainly the industrialized countries of Western Europe, the U.K., Canada, and Japan. Since 1949, Western Europe, the U.K., and Japan have nearly tripled their foreign reserves. They have risen from depending largely on U.S. financing to buying largely with dollar earnings. In contrast to our limited trade with the less developed countries, we do an active commercial business with the industrialized countries such as these, both buying from them and selling to them.

The ability of a foreign country to buy from us is indicated by its foreign exchange earnings and its gold and dollar holdings. As said previously in this Conference, the gold and dollar position of the industrialized countries has improved so markedly in recent years that for the greater part their currencies have become freely convertible, and reasons for such countries to discriminate against our agricultural products for balance of payments have largely disappeared. This is a healthy situation, one toward which the United States has worked ever since the days of the Marshall Plan. The problem now is to get remaining restrictions removed.

What's good for the industrialized countries also can be good for the less developed ones. What's being done under Public Law 480 to help countries develop their economies, and similar assistance envisioned under the Food for Peace concept, with other developed countries helping to share the load, add up to helping the less developed areas become better cash customers.

Whether we're dealing with the developed or the underdeveloped countries, it's axiomatic that we have to buy foreign products if we expect other countries to buy from us. This is the way that foreign customers acquire the dollars that they use in buying our products. In this regard, our agricultural imports are important

dollar earners for our foreign customers. Our import market is stable and it is large. Only the United Kingdom imports more agricultural products than we do. Of all the non-competitive agricultural products entering world trade, such as coffee, cocoa, and rubber, the United States buys almost one-half. Our purchases of competitive products, such as sugar and livestock products, make up about 40 percent of our agricultural imports.

As the countries that are now underdeveloped are able to industrialize, they will be moving more products -- not necessarily agricultural -- into world trade. The degree that we are able to sell to such countries will be pretty well governed by our willingness to buy such products from them.

Quality.

Another problem we must meet in world trade is quality. At some time or other we have all heard criticism that some of our exported farm products do not measure up in this respect. As far back as 1954 when a series of four White House agricultural trade missions made their studies, they reported picking up "complaints about the quality, grades, deliveries, and packaging of certain United States agricultural products." Some of the adverse reaction, they noted, especially with regard to commodities sold on a bulk basis, "may be due to a failure on the part of some importers to purchase on the basis of Federal grades and to require Federal grade certificates and certificated weights."

When you do a \$4 billion export business, some criticism of some part of your exports is inevitable. Every exporting country encounters it. In today's highly competitive market, however, it is important that there be minimum real cause for criticism.

Probably the main cause for criticism of our exported farm products arises from misunderstanding of U.S. selling practices and contract specifications. It

is an oversimplification to criticize a shipment because it happens to be low quality; we export a wide range of quality, based on demand for that range, just as we consume a wide range of quality in the home market. The important thing is to make sure that the foreign buyer understands clearly what he is buying and orders what he actually wants, whether it's high quality, low quality, or in between.

In some cases, what's needed is more education of foreign buyers. A good start in this has been made by some of the agricultural trade groups, under our cooperative projects. Foreign buyers of tobacco, wheat, and soybeans, for example, have been brought to the U.S. so they can become better informed of our production and marketing methods. U.S. marketing specialists and trade groups are actively working abroad toward the same end.

Also we need to exert more effort to meet special requirements. The Extension Service team that made a cooperative study of the European market earlier this year phrased it this way: "There are opportunities to improve the competitive position of the United States by being sensitive to the unique specifications to meet market requirements."

The problem of quality has several aspects. Sanitary requirements is one. The British don't let our live or uncooked poultry come in because of Newcastle disease. Several markets have excluded our unprocessed pork because of VE (vesicular exanthema) -- a disease which the Department was able to announce a few days ago finally has been eradicated from every State.

Foreign health regulations touch on other commodities, too. Fruit, for example. There tends to be delayed recognition and acceptance in some importing countries of some of the pesticides and preservatives that we use in modern production and marketing of fruit, and this is sometimes an export limiting factor.

When problems of quality arise, the best approach is to bring them out in the open and try to resolve them mutually. A recent example of success in doing this involves exports of lard to Germany. Our lard did not match German import standards; after consultations, including bringing German veterinarians here to inspect our processing methods, we have been able to arrive at a mutually satisfactory agreement.

Trade Restrictions.

Trade restrictions are among the most difficult of problems that we encounter. It is frustrating to have a good product in plentiful supply, offered at a competitive price, only to find it excluded from a market by reason of import quotas or other restrictions.

The removal of trade restrictions against U.S. products, including our farm products, is today one of our Government's major policy issues. Appeals are being made and arguments are being advanced at highest levels in our foreign relationships in the cause of trade liberalization.

Trade restrictions have been with us for a long time and exist for a number of reasons. Many countries are trying to be more self-sufficient in agricultural products. They may limit or exclude imports for reasons of defense, or to save dollars, or to favor home producers, regardless of whether or not the home production is economic. Secondly, and probably just as important, many countries practice bilateralism -- a "you buy from me and I'll buy from you" proposition that excludes other traders.

The biggest trade liberalization effort today is directed primarily at removing those lingering restrictions that are hold-overs from the days of dollar shortages after the war. Many countries were left destitute by the war and for a period

they were forced to limit purchases from us to protect their scanty gold and dollar supplies. But the financial recovery of many of them has been remarkably successful. The postwar dollar problem has practically disappeared. During the past year, 29 countries of Western Europe and the sterling and French franc area were able to make their currencies convertible to non-residents.

Unfortunately, convertibility and plentiful purchasing power do not in themselves guarantee the removal of trade barriers. That is why the United States is pressing today for liberalizing action that we know many countries are capable of taking. The position of the International Monetary Fund -- that discriminations on balance-of-payments grounds generally are no longer justifiable -- was heartily endorsed at the recent GATT (General Agreement on Tariffs and Trade) session in Tokyo by Under Secretary of State C. Douglas Dillon. In his opening statement at this 37-nation meeting, Mr. Dillon expressed the strong belief that the time has come to do away with discriminatory restrictions altogether, and that the task should be completed during the next few months.

I do not mean to minimize the progress already made in liberalization. The success to date is heartening. But major restrictions remain that cannot be justified on grounds of dollar shortages. Many of them are directed specifically against our farm products. Our success in getting such restrictions lifted will have immediate beneficial effects. We must make substantial further progress in erasing these restrictions in order to permit our agriculture to share fully in the world's improved trade possibilities.

Situation by Commodities

The test of our ability to cope with the problems of world trade comes when we review the status of the individual commodities.

COTTON: Since the war there has been a build-up of foreign cotton production, which has increased our competition. At the same time, there has been an increase in production and use of competing man-made fibers. Under the current export program, our cotton export prices appear to be fully competitive, and supplies available for export will be larger. U.S. cotton exports in the year ending next July 31 are expected to total at least $5\frac{1}{2}$ million bales, approximately double last year's low volume.

GRAINS AND FEEDS: For wheat and wheat flour, we expect 1959-60 exports to be 410 million bushels, which is 33 million under last year. It would be possible to substantially increase our wheat exports if the purchasing power of people in less developed areas was raised, if these people had a better acquaintance with the nutritional values of wheat as a food, and if wheat could be made more readily available through expanded storage and distribution facilities abroad.

In the case of rice, we expect a substantial increase in exports despite the fact that rice production in the Far East has reemerged and we no longer have the outlet there that we have had in some recent years under Government programs. In selling to European customers we have a problem in that competitors offer rice for delivery throughout the marketing season at established prices, whereas we generally do not. Forward contracting and delivery arrangements are needed in meeting this competition.

In the case of feed grains, the upward trend in exports in recent years should continue for several more years because of expanding livestock and poultry production abroad. Drought in Europe indicates a probable further marked increase in our feed grain exports in the current marketing year. The interest in grain sorghums as a mixed feed component makes its export future particularly favorable.

TOBACCO: U.S. prices for the principal export types of tobacco are above those

for similar tobaccos produced abroad, which strengthens the position of our competitors. Also, in many countries discrimination against "dollar" tobacco continues. On the brighter side, the U S. still has the largest supplies of good quality cigarette tobacco, there is a steady rise in cigarette consumption abroad, and there is considerable improvement in the gold and dollar reserves of the most important tobacco markets abroad.

FATS AND OILS: Combined exports of U S. soybeans and edible vegetable oils are expected to set a new high record in 1959-60. This reflects reduced supplies in other areas and continued strong foreign demand. But this big movement has its problems, the greatest involving the question of our domestic soybean crush. Soybeans, as we know, are split two ways -- into oil and into meal. The meal market indicates a greater crush than the oil market. These two pulls are difficult to reconcile.

FRUITS: Prospects for exports of most fruits appear better than in 1958-59. But three major problems continue to be encountered. Most worrisome is the discrimination against U.S. fruits on the part of countries wanting to protect local, colonial, or bilateral sources of supply. Another is the slowness of some importing countries to change their food regulations so as to accept modern practices of fruit production and marketing. And another is that foreign growers are producing more fruit, improving their quality, and providing stiffer competition.

ANIMAL PRODUCTS: A big problem in exporting animal products is price. We produce for the home market and our export prices in general are not competitive with foreign suppliers. Exceptions are poultry and some of the excess products of our livestock industry, such as lard, tallow, and variety meats. As mentioned earlier, our dairy exports also are handicapped currently by problems of supply. In countries trying to conserve foreign exchange, animal products commonly are

placed in the luxury category and their importation is restricted. Whatever is achieved by way of liberalized trade and improving economies should react favorably on our exports of animal products.

Conclusion.

On an over-all basis, we are making progress in coping with the problems of foreign agricultural trade. We are doing better in some cases than in others. In all cases we are trying to do something about them.

Some of these problems can best be met by private trade. Some require the help or the special handling of Government. For most of them the job can best be done through combined effort.

We have made an excellent start in this private industry-Government sort of combination, and we expect to do much more in the period ahead. And when I say Government, let me use the term in the broadest sense so as to include not only Federal (including the many participating agencies of the Department of Agriculture) but also State Governments. Wherever we Washington people are teamed up with you State Extension people in the area of marketing, a better job gets done than we could possibly do alone. There's a lot that needs doing. We look for you continued help in doing it.

Remarks by Bradley Fisk
Deputy Assistant Secretary of Commerce for International Affairs
before the Agricultural Outlook Conference, November 16, 1959

I have been asked to discuss before this Annual National Agricultural Outlook Conference, as a keynote for this opening session, major and current developments in the world economy as they bear on business conditions abroad and on our domestic outlook for the next year or more.

You are hearing a separate discussion of the outlook for the U. S. domestic economy at large. That must include, along with consideration of the major domestic economic determinants, an estimate of the nature and degree of influence on domestic economic trends which may be anticipated from our transactions with the outside world.

Without knowing in advance of today's meeting just what that discussion contains along these lines, let me make a brief preliminary comment on the influence which our foreign trade transactions seem likely to have in, say, the next 6-12 months on general economic trends within the U. S. domestic economy.

I anticipate for 1960, as compared with 1959, a stimulus to U. S. production and income from rising foreign demands for U. S. goods--which will outweigh any dampening effects from the directing of more expenditure to imported merchandise.

Some further rise in imports next year may be anticipated after the large annual gain clearly indicated this year, but there are reasons for thinking it will be much smaller. On the other hand, for reasons which will become apparent in my discussion of developments in world production and trade, I look forward to a considerable rise in our total exports next year.

It is beyond my competence and proper scope of analysis for this occasion, of course, to go further and attempt to gauge the near-term outlook of our agricultural exports, even as a total. My own discussion will be confined to a look at the world economy, with particular reference to key foreign areas, and a consideration of the main developments--primarily abroad although those at home here in the U. S. are of course very important--which are influencing international demand as a whole and the total demand abroad for U. S. products.

Foreign demand upturn boosting U. S. exports

My optimism regarding our near-term export prospects is based on the renewed strength evident both in our own export trade this summer and in total world trade.

The upturn in foreign demand for U. S. goods in recent months reflects a rather general strengthening of international demand during 1959. This in turn largely reflects new production gains in all the industrial regions of the world.

To some extent, moreover, those gains themselves derive from buoyancy of demand for imports in certain areas, with the United States and its rapidly growing purchases of foreign manufactured goods the notable case in point. Accompanying these developments, a new uptrend in total demand abroad for imports of all kinds seems to have been setting in lately. Our goods are apparently sharing in this new expansion of import demand abroad, and I think they will continue to do so.

In considering the outlook for, say, the next year, for demand abroad for all imports and for U. S. goods, perspective is useful both as to just where we were at the takeoff point for the new trade uptrends which seem to have begun this year and as to the course of change in total world trade and in U. S. foreign trade over the last few years. Next year's fortunes for our export trade will reflect both what they have been very recently and how rapidly they can be expected to change.

Export peak in early 1957 followed by slump

As you all know, our total exports have been at rather considerably reduced levels in 1958 and 1959, after several years of rapid expansion which culminated in the abnormal peak to which our exports rose in early 1957.

From \$12.3 billion in 1953, in the wake of the Korean War boom in world trade, our nonmilitary exports had risen to \$19.5 billion in the entire year 1957. In the latter part of that year, however, they fell off rapidly, and last year they totaled no more than \$16.3 billion. A further decline set in about a year ago, and exports fell off to an annual rate of less than \$15½ billion in the first quarter of this year.

When allowance is made for the influence of certain special and temporary factors which boosted our export total in 1957 but allowed it shortly to fall off again, our export experience in 1958 and 1959 does not look too unfavorable on the basis of our experience in the previous several years.

To some extent the extraordinary peak to which our exports rose in 1957 and the subsequent relapse resulted from abnormal demand factors abroad which had their impact peculiarly on U. S. products.

A rush to buy U. S. cotton got under way in the fall of 1956 and reached its peak in the first half of 1957, as a result of long-anticipated developments in the pricing of our cotton for export. At the same time a surge of importing developed in Japan, with the accelerating industrial growth there. Much of the increment in Japanese imports went into stockpiles. Superimposed on these developments came the effects of the Suez crisis with the resultant soaring exports of U. S. petroleum and products.

With the passing after mid-1957 of these necessarily temporary gains in our exports; under normal conditions their total was sure to fall off considerably.

However, there were other influences on demand abroad for our goods. The foremost of these was the passing of the crest in the world economic boom of the period 1953-57, marked by downturns in production in a number of countries and declining prices of numerous primary commodities.

Another explanation has been widely advanced, to the effect that U. S. prices allegedly had risen to such an extent that our goods were being "priced out of foreign markets." I will have more to say about this supposition later, after discussing the recent courses of total international trade and of foreign demand and the associated fluctuations in our exports.

Export uptrend of 1953-57 reflected booming world economy

I have already mentioned the world economic boom of 1953-57. This period was marked not only by rapid increase in total U. S. sales abroad, but also by a strong and persistent uptrend in international demand as a whole. In four years, world trade rose by nearly one-third in volume, so that by 1957 world exports attained a record peak of \$100 billion.

The mainspring of this rapid growth of international demand from 1953 to 1957 was the vigorous growth of production and income, principally in the industrial regions of the world.

Expansion was most rapid in the economies of West Germany and Japan, as those countries made their greatest strides of the entire postwar era in economic reconstruction. Economic gains were also especially strong in France and Italy.

Growth preceeded at a more or less normal rate in the United States and was comparatively rapid in Canada. There was also some expansion in the United Kingdom, but at a relatively slow rate, as was true also of several of the smaller Western European countries.

Increasing success in selling goods in international markets played a vital role in stimulating internal economic expansion. This was particularly true of Japan and of West Germany, and increasing opportunities for international business were also exceptionally important stimuli for other continental European countries.

The general effects on international trade arising from this dynamism of the industrial regions were varied, both by types of goods and by regions.

The needs of the industrial areas for materials to supply their manufacturing industries grew more or less in step with their total outputs of manufactured goods. This growth of import demand was stronger for non-agricultural materials than for those of agricultural origin. Comparatively slow growth also characterized industrial areas' imports of foodstuffs.

Generally speaking, exchange of manufactured goods between and within the industrial regions grew more rapidly than did industrial regions' total imports of primary products, particularly those of agricultural origin.

Nevertheless, even apart from cotton, U. S. agricultural exports to foreign industrial regions were around one-half greater in value in 1957 than they had been in 1953, and were nearly as large a fraction of our total exports in 1957 as in 1953.

Reflecting the relatively slow growth of industrial countries' imports of primary products, the aggregate earnings of countries in nonindustrial areas from their exports rose by 20 percent from 1953 to 1957, as compared with a 50 percent rise in the corresponding total for the countries in industrial areas.

The concurrent expansion in import demand on the part of nonindustrial areas much exceeded that in their export earnings. Their aggregate imports rose 38 percent, reflecting extensive financing through increased aid, principally from the United States, and through drafts on foreign exchange reserves, new borrowings from private sources in industrial areas, and increased inflows of private capital for direct investment.

Trade reduced by industrial downturns of 1957-58

Just as the prime movers of the trade gains in 1953-57 were the industrial countries, these were the main source of the new instability of world trade which appeared last year.

Manufacturing output declined from mid-1957 to early 1958 in the United States, Canada, and Japan. Industrial production leveled off or dipped temporarily throughout Western Europe. While the overall output index for that region as a whole merely showed a much smaller annual rise than in preceding years, there were sizable declines, on an annual basis, in European output of basic metals and of textile products. These were more than offset by continued expansion in chemicals, advanced durable goods, and food processing.

Particularly in North America, liquidation of industrial inventories triggered by weakening production trends accelerated the production downturn, and contributed to reductions in both the volume and the prices of industrial materials imported.

With reduced export earnings in primary-supplying regions abroad forcing curtailments in their imports as well, there was a moderate general contraction in international demand last year. World trade, as measured by the aggregate exports of all non-Communist countries, fell off from \$100 billion in 1957 to \$95 billion in 1958.

Since U. S. imports dipped only slightly, the decrease in total import demand outside of the United States was a little greater than that in world trade as a whole. Exports to the world outside the United States from all non-Communist countries registered a decline of 6 percent in value.

In the aggregate, the decrease in demand abroad for goods from countries other than the United States was relatively small. Their total exports to the foreign world decreased by only about $2\frac{1}{2}$ percent as compared with the 16 percent decline experienced by our own country.

Exports from the nonindustrial areas alone, however, fell off by considerably more than those from countries in foreign industrial areas. Total foreign exchange earnings of nonindustrial areas from export trade declined

by 5 percent from 1957 to 1958. In terms of average tendency, this decrease stemmed entirely from lower prices, since losses in volume for some goods were fully offset by gains in volume for others.

Our own agricultural exports dropped by 14 percent in value from 1957 to 1958, although apart from the large drop in shipments of cotton the decline amounted to no more than $7\frac{1}{2}$ percent.

Our exports of foodstuffs and raw materials to Western Europe, which represents around two-fifths of our entire foreign market for agricultural products, fell off by nearly 10 percent in value. It is noteworthy that this did not much exceed the 7 percent decline in that area's total imports of all products from the nonindustrial areas (exclusive of the Communist bloc).

In contrast to nonindustrial areas last year, the export earnings of foreign industrial areas held virtually steady from 1957 to 1958. Increasing sales of advanced manufactures to the United States was one of the stabilizing influences.

In consequence, the gold and foreign exchange reserves of European countries rose substantially in 1958. These reserve gains led to the establishment by most European countries at the end of last year of full exchange convertibility for nonresidents. This was a step toward which U. S. policies had been aimed ever since World War II.

U. S. share in total foreign market in 1958 approximated 1953-55 level

Despite the slump in total U. S. exports last year, they actually kept pace with the net rise from 1953 to 1958 in total demand abroad for imports from all sources.

The United States had supplied a disproportionate amount of the increase in foreign import demand from 1953 to the 1957. While total exports of all non-Communist countries to the world outside the United States rose by nearly \$24 billion, to a total of about \$87 billion, the United States, which ordinarily supplies about one-fifth of all goods supplied by non-Communist countries to the foreign world, furnished nearly one-third of that increase.

This very large share of the increase caused our proportion of all goods supplied to the entire world outside the United States to rise to 22.5 percent in 1957, as compared with a steady 20 percent in the three year period 1953-55.

The disproportionate rise to 1957 in the U. S. share in the total market for imports abroad was reversed last year. Our exports registered a 16 percent decline in value, and our share of the total market abroad declined considerably. It did not fall any lower, however, than its 20 percent level of the years 1953-55.

This was despite the fact that the considerably greater-than-average reduction in Canadian import demand had its incidence almost entirely on the United States. The U. S. share in the total market abroad outside of North America, although reduced from its most recent peak, actually remained a little above what it had been early in the recent world boom.

United States and Canada lead industrial upturn

The world recession has proved fairly short-lived, even though international trade remained rather lacking in buoyancy, after its downturn in the latter part of 1957, until this spring.

With automatic stabilizers in the United States and Canada helpful in maintaining consumer incomes and with credit policies favoring increased investment, particularly in housing, the industrial recession in North America was quickly arrested. After leading the downturn or leveling off of production in the industrial areas, North American manufacturing output also led the upturn.

Recovery in U. S. and Canadian industrial activity got under way a year and a half ago, at about the time the previously strongly upward industrial trends in Europe were leveling out or showing signs of turning downward. By this summer, U. S. manufacturing activity, as measured by the Federal Reserve Board seasonally adjusted index, had risen from a low of 128 in April 1958 to 158 in June, the last full month before the steel shutdown. This level was about seven percent above the previous record monthly peak two years earlier. Canadian factory production by the second quarter this year mounted above that of any earlier quarter.

The output of Japanese manufacturing production also was in an early upturn, and by last fall was again rising in a trend which accelerated in the first half of this year.

Monetary and credit ease in Europe, greatly aided by reduced import prices and resultant boosts to reserve accumulation, has contributed to the renewal of economic growth in that key area for world demand and for U. S. foreign agricultural marketing prospects. The generally optimistic atmosphere there and the stimulus of new investment opportunities stemming from the establishment of the Common Market have also been expansionary factors.

In Europe, industrial activity had displayed a lack of buoyancy throughout last year. This year, however, vigorous economic expansion there has set in again. By the second quarter, the index of European industrial output (seasonally adjusted) rose to 139, as compared with 132 in the second quarter of 1958 and 135 as late as January-March this year.

In June, European factory output, on a seasonally adjusted basis, was 8 percent above its lowest monthly value in 1958, and exceeded by about 4 percent its record monthly value prior to 1959. Late reports indicate that this new advance has been continuing since midyear.

The new European output gains have been strong not only in West Germany and France, whose economies expanded most rapidly in 1953-57, but also in the United Kingdom. Increases have been registered, moreover, in nearly all other industrial countries of Western Europe.

In the area as a whole, chemical industries have led the output gains. The total output of food, beverage, and tobacco processing industries was the highest on record in the first quarter this year, but that of textile industries on the other hand, at least until midyear, persisted at a reduced level.

World trade in lagging recovery

Broadly speaking, the effects of the reinvigorated dynamism of the industrial economies on world trade have appeared with some lag.

Total world exports, seasonally adjusted, had dropped from 1957 to 1958 as output fell off here and leveled out in Europe, and as inventories were reduced here and in Canada and Japan and to some extent in Europe also. The low in world trade was reached, as in industrial output, in the earlier part of last year.

Although there was some immediate rebound, world export totals for several quarters failed to indicate any clear recovery trend in total international demand, apart from expected seasonal changes. An apparent upward tendency in trade between industrial areas was offset by a downward tendency in total exports from nonindustrial areas. The aggregate export earnings both of industrial areas and of nonindustrial areas in January-March this year were at about the same levels as twelve months earlier.

The principal area of continued weakness in import demand was in the nonindustrial areas--consistent with the general tendency of import changes in those regions to lag behind changes in their exports. Their aggregate imports in the first quarter this year were somewhat below 1958 levels, after allowance for seasonal change. The weakness was rather general among the various major areas, though particularly evident in Latin America.

The imports of industrial areas in January-March 1959 showed no net change from their reduced total in early 1958. A sizable increase in U. S. imports was partly offset by lower European imports. Europe's imports from the outside world were no higher in volume than they had been in the first quarter of 1958, and in total value were actually somewhat reduced, owing to lower prices.

Since the early months this year a fairly strong upturn has appeared in world trade. In the second quarter, world exports rose considerably, and third quarter export data for industrial countries indicate a continued uptrend.

In addition to the strong rise in U.S. imports this year over levels of 1958 or of any earlier year, imports of most other important industrial countries this spring and summer showed sizable percentage increases over levels of the second and third quarters of 1958.

Almost entirely reflecting these gains, the increase in total world exports amounted to about \$7 billion, in terms of annual rates, from April-June 1958 to the corresponding months this year.

In volume terms, the rise in world exports brought them up distinctly above their previous peak quarterly levels in 1957, and in April-June they exceeded those of two years earlier by about 7 percent. This two-year advance, however, represents a materially slower average annual rate of expansion thus far in the renewed growth of trade than that characterizing the boom period ending in 1957.

The latest trade gains appear, on the average, to have entirely reflected changes in volume, at least to midyear. The general level of international prices seems to have remained, in the first six months, close to the lowest position reached in its entire downward drift since 1957.

Since U.S. imports bulked large in the world trade rise, the increase in total demand in the foreign world was substantially less than that in international demand as a whole. Exports of all non-Communist countries to the world outside the United States were up \$4 billion in rate in the second quarter.

However, a somewhat greater rise from a year earlier will probably be recorded for the third quarter. Total demand abroad for exports is now at about \$85 billion annually. This is about as high in value terms as in 1957, and compares with about \$80 billion annually twelve months ago.

Expanded foreign demand in prospect in 1960

Further gains over the next 6-12 months in world trade and in total demand abroad for imports seem fairly certain.

Total U.S. imports are expected to increase by a considerably smaller amount next year than they have this year, but higher levels of manufacturing activity are anticipated here, with some increase in U.S. imports of industrial materials therefore likely.

Production trends in most other industrial countries are expected to continue upward at least well into 1960. An annual gain of 5 percent would not be surprising in factory production in the Common Market countries, with GNP there expected to rise nearly as much as industrial output. This year's expansion in output and total demand in the United Kingdom is expected to continue for the time being despite some retarding effect anticipated from lower fixed investment by private industry there.

Canada, following this year's strong gain in its factory output and total GNP, should show further economic gains in 1960. With Japan's export sales up strongly this year, that country's output and domestic demand seem likely to keep on rising for a while.

Nonindustrial areas, moreover, should also furnish improved markets next year. Their export volumes are already up, reflecting increased demands in industrial areas, and presumably some upward tendency in the prices of primary products will appear.

Decreased prices have prevailed this year for coffee, cacao, linseed oil, rice, tea, and also for petroleum. On the other hand, substantial price advances over average 1958 levels have already been evident this year for rubber, beef, copra and coconut oil (until this summer), hemp, and also for copper, lead, and tin. Next year, the export earnings of nonindustrial countries seem likely, on balance, to be augmented somewhat by improved prices.

Moderate optimism, therefore, seems justified for import markets in non-industrial areas, although a new import boom in those areas of proportions approaching that of 1957 is altogether unlikely.

All major signs seem to point, therefore, to expanded international demand in 1960, continuing the gains which appeared this spring and summer.

U. S. exports to share in world trade expansion

Confidence is justified, if my analysis of current trends in the world economy is sound, that foreign marketing opportunities for U. S. exporters will continue to increase, as they have begun to do during the course of 1959.

These opportunities seem particularly assured in foreign industrial areas, where the greater part of our total foreign market for agricultural products is located. Simply on the basis of production and income trends alone, we should experience good sales of our farm products in foreign industrial areas next year. This is without reference to supply factors peculiar to individual commodities, such as specific shortages of local production through drought, etc.

Apart from aid programs, expanding markets in nonindustrial areas do not seem as likely to benefit our agricultural producers. Gains in market opportunities there in the immediate future, much more than in foreign industrial areas, will apply mainly to nonagricultural products, primarily manufactured goods.

As for the influence of our aid programs on the trend of our agricultural exports to nonindustrial areas, this is a subject which will doubtless be given authoritative attention this week in the discussions of the outlook for various particular agricultural commodities.

Our total foreign marketings next year, and those of agricultural products as well as other U. S. goods, should benefit somewhat from the removal of discriminatory restrictions against our goods in the control of imports for balance-of-payments reasons by foreign countries.

Our own government and international financial agencies have lately spoken out strongly for elimination of these now anachronistic discriminatory provisions. External convertibility of the major European currencies since the first of this year has made discrimination against dollar goods without point in many areas. Important new steps have been taken already by the United Kingdom to remove most remaining discriminations against our goods, and similar steps have been announced for the very near future by several other foreign countries.

Removal of discrimination against dollar goods will no doubt be of some benefit in the foreign marketing of our farm products as well as of other U. S. goods. Particularly for farm products, however, the increase in sales to be hoped for under nondiscriminatory import controls abroad may not be large. For the last several years, most U.S. agricultural products which were effectively in demand in Europe, to cite the most important area from the standpoint of our agricultural exports, in general have been liberally licensed for importation.

Exports to Canada and Europe already increasing

The rebound in foreign demand has already been registered in our non-military export totals. Exports rose from less than \$15 $\frac{1}{2}$ billion in annual

rate in the first quarter this year to about \$17½ billion, on a seasonally adjusted basis, in the summer quarter.

Despite exceptionally low sales abroad of both cotton and steel, coupled with the slump this year in the Latin American market, exports in the third quarter exceeded their total in the third quarter of 1958 by some 6 percent.

The renewed impetus to exports came from industrial areas abroad. Renewed economic expansion in Canada, after its mild recession in 1957-58, has brought considerable recovery in our sales there. With vigorous expansion reappearing also in Europe and Japan, exports to those areas in the third quarter mounted above their levels in the corresponding period last year. The trend of exports to Europe, however, was still dampened this summer by persisting low levels in shipments there not only of cotton and steel but also of coal and aircraft.

In contrast, demand for our goods continued to sag in Latin America. That area's foreign exchange earnings had been curtailed by low prices, particularly for coffee, and by reduced world demand for some of its other important products. Our sales there, which had shown relatively little decline until around mid-1958, fell off rather severely thereafter.

Our exports to nonindustrial areas of Asia and Africa, on the other hand, have been relatively stable at about last year's levels.

These developments seem to indicate that foreign marketings of our goods are picking up more or less in line with trends abroad in total import demand. This is consistent with experience in 1953-58, which affords some basis for anticipating that our share of the total foreign market should be fairly well maintained in a general upswing.

There seems to be widespread belief, on the other hand, that we are being increasingly outcompeted in foreign markets. The export upturn of recent months does not, of course, preclude such a possibility. Close analysis of the latest trends in our participation in markets abroad cannot be made until the necessary data become available.

U. S. share losses limited in foreign markets for manufactures

I should like, in any event, to venture a few comments on the behavior of our market shares in recent years. The latest valid information on this subject is certainly relevant to a discussion of the outlook for our export trade.

It is my belief that competitive conditions in foreign markets have not turned so much against us as has been widely alleged. Far too much significance for the long term has been inferred from short-term elements in the 1957-58 export slump.

Some of my associates in the Department of Commerce have made a careful examination of extensive statistics showing changes, over 5 years ending with 1958, in U. S. percentage shares of individual regional markets abroad for exports of particular classes of manufactured goods. Their findings indicate that strictly competitive losses in the 1958 downswing were neither as pervasive nor as large as popular alarm would suggest.

This evidence deals with the actual performance of our exports in comparison with those of principal competing countries. It reveals a great diversity in market-share behavior for various product categories in particular regional markets.

For several important categories, the supposition of sharp shrinkages in our market shares is confirmed by the data. For a very wide range of other manufactured products, however, numerous smaller losses and almost equally numerous gains virtually counterbalance each other in the aggregate.

The statistical evidence to which I have just referred lends support to a moderately optimistic view of our export prospects in most lines as the renewed expansion of world trade proceeds. Even with respect to fields in which our market shares abroad have shrunk, competitive reactions of U. S. businessmen may well recapture some of the lost ground.

With respect to near-term foreign market prospects for our agricultural products, it may be asked just what significance, if any, is to be found in this relatively optimistic viewpoint concerning prospects for selling our factory products abroad.

Now, we can recognize that the export prices of our manufactured goods reflect a myriad of internal U. S. prices--for farm products, for transportation which moves farm products as well as other goods to our ports for shipments abroad, and for farm machinery, fertilizers, fuels, and other supplies, for domestic as well as foreign agricultural production. Therefore the viewpoint I have suggested as to the general competitiveness of our factory products abroad has considerable significance for gauging the comparative level of many cost prices underlying the supply and pricing of U. S. agricultural products. These, in turn, are among the elements of importance in gauging the foreign market outlook for farm products.

The analysis of foreign market shares for our manufactures, to which I have referred, seems to afford little basis for pessimism as to the competitive level, in broad terms, of cost prices to farmers for a good many non-agricultural products and services which are used in farm production and which also enter into the prices of manufactured goods sold abroad.

Import rise slackening

In my opening remarks I ventured a comment that our total imports next year should increase by a rather smaller amount than they did in 1959. The rise in imports this year has been strong, but the uptrend seemed to be flattening out this summer.

Imports rose from an annual rate of about \$12-3/4 billion around the middle of last year to more than \$15½ billion, on a seasonally adjusted basis, by the second quarter of 1959. This rise was spurred in part by continuation of the long uptrend in U.S. demand for automobiles and other foreign advanced manufactures. It also reflected rising demand for various foreign industrial materials responsive to the upswing in U.S. industrial output, along with exceptional demands for steel arising from anticipation of shortages.

Since the spring, however, the import uptrend seems to have leveled off considerably. The third quarter level differed little from that of the second. If the flatter trend of the last several months continues, our imports seem likely to total around \$15 $\frac{1}{4}$ billion for the entire year.

Next year the import uptrend, unlike that from the latter part of 1958 and the first half of 1959, should be tempered by several factors. With expansion of domestic manufacturing production smaller next year, after the sharp rise of 1958-59, purchases of foreign industrial materials will probably rise much less than they did this year.

Moreover, we should experience higher output in 1960 of steel and of meats, products which have been imported in unusual amounts this year. Also there is a possibility that the advent of the U. S. automobile industry's new "compact" cars will divert some U. S. demand from European automobiles. The rapid increase in our purchases of European cars has contributed greatly to the persistent uptrend in the last few years in our total imports of advanced manufactures.

Despite the improvement lately in our exports, they are currently expected to total only about \$16 billion for the year, exclusive of military-aid shipments. With the effects of the steel shutdown likely to persist for several months, some lag in export of products such as vehicles and machinery in the final quarter is inevitable. Gains are anticipated for the current quarter, however, in exports of agricultural products, especially cotton.

Trade balance down sharply in 1959

It now looks as if our annual export surplus in merchandise trade will be under \$1 billion for 1959, as compared with \$3.4 billion in 1958. With a large excess of payments over our receipts from abroad for non-trade transactions, the transfer of gold and dollars to foreign countries may exceed \$4 billion for the entire year.

The currently large payments deficit in our international accounts has generated much concern, both governmental and private. I believe, however, that material improvement lies ahead, through rising exports, once the effects of the steel shutdown are overcome and on the assumption of no other crippling interruptions of production or of transportation.

Even with the strongest improvement in our balance of merchandise trade which can realistically be expected next year, we will still experience a sizable deficit in our international transactions as a whole. If we are to approach balance in our international accounts while maintaining our military expenditures abroad, our private capital flow to foreign countries, and our governmental aid to them, at around recent levels, we shall have to sell considerably more goods in foreign markets. The needed additional sales will have to come either from sufficiently rapid growth of general import demand abroad, or from expansion in our shares of foreign markets, or from some combination of these.

To attain the export levels needed will require the utmost exertion by our producers of exportable goods to reduce or hold down their costs and

foreign selling prices. It will require, further, the continuing and intensified cultivation of markets abroad with all appropriate tools, including not only customer relations and servicing but also market research, sales promotion, credit facilities, etc. Beyond these, it demands that our government pursue, energetically and faithfully, both those domestic policies which are calculated to foster economic efficiency at home and those which will restrain undue upward tendencies of prices and costs. Each type of policy must be applied to such an extent that enough of our goods, whether of factory, farm, or other origin, will be kept fully competitive price-wise in foreign markets.

UNITED STATES DEPARTMENT OF AGRICULTURE
Agricultural Research Service
Farm Economics Research Division

TECHNOLOGICAL CHANGES THAT AFFECT LIVESTOCK AND FEEDS 1/

By

Orlin J. Scoville, Chief
Costs, Income, and Efficiency Research Branch

The persistent and continually growing surplus of feed grains with its potential for livestock surpluses is one of our major farm problems. The Center for Agricultural Adjustment at Ames, Iowa, has called it "... probably the foremost problem facing agriculture over the next few years." Some economists view this problem with special concern because they see no adjustment processes now at work that will curb or reduce the enormous buildup in feed grains.

What are the dimensions of the feed-grain problem? What technological changes are responsible for it, and how will technology influence the solution?

Comprehension of the feed-grain problem requires an understanding of the feed-livestock economy and of other sectors of agriculture. The relationships between feed output and livestock output must be kept in mind. Today's feed surplus is tomorrow's livestock surplus. Feed grains have competitive and complementary relationships with high-protein feeds, with forages, and with pastures. The feed problem is tied closely to the wheat problem. Feed grains and wheat are alternative uses of land, and wheat can be a competitive source of feed. Acreage-allotment programs, particularly those for wheat and cotton, impinge upon the feed-grain problem, because of the possibilities for shifting land into feed crops.

The feed surplus affects a broad sector of American agriculture. Feed crops make up three-fourths of the total acreage of crops harvested. Of the seven crops with the largest acreages, six are used for feed; the other is wheat, a part of which is used for feed. In addition, there are about a billion acres of pasture varying in quality from good rotation pastures to woodland or desert grazing. On a feed-equivalent basis, pastureland is about equal to 183 million acres of average hay land.

Livestock makes up about 55 to 60 percent of the value of farm marketings. Fifty-two percent of all fertilizer used is applied to feed crops and pasture. As of August 31, 1959, feed grains and soybeans were 39 percent of the value of all commodities owned by the Commodity Credit Corporation.

1/ Talk prepared for delivery before the 37th Annual Agricultural Outlook Conference, Washington, D. C., at 9:45 AM, Tuesday, November 17, 1959.

Some idea of the magnitude of the surplus of feed concentrates may be gained by comparing stocks with annual disappearance for uses that include feed, seed, export, and industrial uses. At the beginning of the current feeding year, October 1, 1959, the supply of feed concentrates was 265 million tons. Total disappearance for the year is estimated to be about 185 million tons, and stocks of feed grains at the end of the year will be about 80 million tons. In addition, stocks of wheat on July 1 were equal to 38 million tons, a part of which might be used for feed if made available at a competitive price.

There are various ways of deciding how large stocks of feed grains ought to be in order to stabilize prices and protect against emergencies. Application of the definition of "normal" stocks of corn in the Agricultural Act of 1954 to all feed grains indicates a normal carryover of about 20 million tons. A recent review of several studies indicates that about 35 million tons of all feed grains are about the maximum that would be needed for stabilization purposes. ^{2/} With respect to wheat, a USDA study indicates that a carryover of about 14 or 15 million tons would provide adequate protection against all except the worst weather hazards, and would meet the initial shock of defense emergencies. ^{3/} Viewed against these norms, stocks of feed grains are more than twice as large as needed, and stocks of wheat are about 2 1/2 times as large as needed.

The annual rate at which we are adding to feed grain and wheat stocks provides another view of the surplus. Since the fall of 1954, we have accumulated an average of 7.3 million tons of feed grains per year. This is equal to an annual average production from about 7.9 million acres. We have added to stocks 2.1 million tons of wheat a year, or the equivalent of production from 2.6 million acres of wheat. These additions have occurred, even though we have had an expanded conservation-reserve program and a land-adjustment program in the Great Plains. Without these programs, the stocks would be greater. It is estimated that 14.5 million acres in the conservation-reserve program have been diverted from wheat and feed grains.

The pervasive changes in the feed-livestock economy reflect rapid changes in technology. Progress in crop and livestock technology must be kept in mind in order to understand the changes that have occurred in production and utilization of feed grains.

Significant changes have occurred in consumption of feed grains among different kinds of livestock. Hogs are the chief users of feed grains, but consumption of grain by poultry has been increasing rapidly. Poultry now consume half as much feed grain as do hogs. Dairy cattle are the third most important consumers of feed grains. An increasing amount of feed grain is fed per milk cow, but the heavier rates of feeding are partly offset by the declining numbers of milk cows. Beef is fourth in importance, and an increasing proportion of grain is taken by beef cattle. Horses and sheep use very little grain.

^{2/} Shepherd, Geoffrey. "How Much Too Large Are the Stocks of Feed Grains?" Proceedings, Feed Livestock Workshop. Center for Agricultural Adjustment, Iowa State College, Ames, 1959.

^{3/} Post, R. E. "Present Size, Composition and Expected Change of U. S. Wheat Surpluses." Paper presented at Intl. Wheat Surplus Utilization

Over the last 50 years, the numbers of grain-consuming livestock have fluctuated sharply from year to year. The number of grain-consuming animal units has increased more rapidly than the number of roughage-consuming animal units. Annual changes in roughage-consuming livestock tend to follow closely the beef cattle cycle.

Changes in numbers of animal units do not indicate trends in livestock production, because production per animal has risen over time. Feed consumption per animal unit also has increased. The calculation of animal units maintains constant unit values from year to year for each kind of livestock. But changes in numbers of grain-consuming and roughage-consuming animal units can be used to compare relative trends between them.

In terms of nutrients, a little less than a third of the total is supplied by grains and an additional 11 percent is supplied by other concentrates that include various grain byproducts. Pasture supplies a little more than a third, and harvested roughages supply about a fifth. Over the years, the largest percentage increase in the total supply of nutrients has come from concentrates, with harvested roughages a fairly close second. The smallest increase has come from pastures.

Seventy-five percent of the production of feed grains comes from the Midwest, with 42 percent from the Corn Belt alone. Since 1952, the largest increases in actual tons have come from the Northern Plains, Southern Plains and Corn Belt, in that order. About two-thirds of the total increase has come from these three regions.

The chief cause of increased production of feed grains has been the higher yields, although changes in acreage have had some effect. Changes in land use resulting from acreage allotments in wheat, cotton, and other crops have contributed to the feed surplus, but they are not its major cause. The harvested acreage of feed grains in 1957-58 was about 5 percent, or 7.1 million acres, higher than in 1952-53--the last years before wheat allotments went into effect. By regions, increases appear only in the West and in the Great Plains; these reflect adjustments to feed grains from wheat and some cotton.

In 1959, 158 million acres were planted to the 4 feed grains plus forage sorghum. This was 8 million acres more than in 1958, reflecting in part the acreage taken out of the Soil Bank. In 1959, there were 71 million acres of hay, 2 million acres less than in 1958, and a decrease of 4 million since 1952-53. The soybean acreage of 23 million was 2 million less than in 1958, but 8 1/2 million acres more than in 1952-53. Sales of cottonseed to oil mills in 1958 were about 20 percent below those of 1952, partly offsetting the increase in soybeans.

Among the feed grains, shifts in land use have resulted in more feed production per acre. The acreage of corn in the Corn Belt has increased, while acreages of oats and barley have declined by about the same amount. In the Great Plains, acreages of corn and oats have declined, while the acreage of grain sorghum has increased.

The progressive and rapid rise in yield per acre is the chief cause of the increased production of feed grains. Recent average yields and a projected yield for 1965 are shown in table 1. In recent years, the outstanding causes of increased yields have been increased fertilization and introduction of hybrid sorghum seed. Land selection and better management are also factors. Increases in yield have been largest for corn and grain sorghum.

Table 1. - Harvested yields per acre, 1947-49, 1954-58, 1958 and 1959, and projections for 1965 1/

Item	All corn	Oats	Barley	Sorghum grains	All hay	Wheat	Soybeans for beans
	Bushels	Bushels	Bushels	Bushels	Tons	Bushels	Bushels
1947-49 average-	36.3	33.5	25.5	19.2	1.33	16.8	19.9
1954-58 average-	44.5	37.8	29.2	26.2	1.55	21.4	22.0
1958-----	51.7	44.7	31.6	36.7	1.67	27.3	24.2
1959 preliminary:	52.5	37.3	27.1	35.9	1.60	21.0	24.1
Projection <u>2/</u>							
1965-----	51.0	39.0	32.0	32.0	1.70	23.0	24.0

1/ Historical data from Crop Production, AMS-USDA, October 9, 1959.

2/ Preliminary projection for 1965 made by a committee of Agricultural Research Service Scientists. They assumed acreages for harvest as in 1959 and continued adoption of known practices. Rapid increases were projected for sorghum grains because of recent development of hybrid seed. The average increase in yield for the four feed grains, however, is projected at a slower rate than recent trends.

Use of fertilizer has increased rapidly for feed crops. From 1947 to 1954, the amount of nitrogen used on corn, oats, and barley increased by 208 percent. The increase for P_2O_5 was 55 percent; for potash, it was 148 percent. In 1954, fertilizers were used on 60 percent of the corn, 31 percent of the oats, 27 percent of the barley and grain sorghums, and only 18 percent of the soybeans. At 1954 fertilizer rates and with the crop yields of that year, it is estimated that use of fertilizer was responsible for increases in yield as follows: 23 bushels per acre of corn fertilized, 19 bushels per acre for oats, 13 bushels per acre for barley, almost 8 bushels per acre for soybeans and grain sorghums, and 16.5 bushels for wheat. These increases in yield reflect improvements in other practices, along with fertilizer use.

Statistics on the amount of fertilizer used for each crop are not available for the later years, but it is known that there have been further increases in rates of application per acre and in the proportion of acreage fertilized.

It is estimated that in 1954, the marginal return for each dollar spent for fertilizer was about \$3.00 for corn, \$2.27 for soybeans, \$1.55 for grain sorghums, \$1.62 for barley, \$1.44 for oats, and \$2.26 for wheat. As calculated, these figures reflect the average of the marginal returns realized by farmers in general including those who applied fertilizer liberally and those who applied very little. With these favorable returns, a substantial increase in fertilizer use and in output per acre can be expected for feed grains, and particularly for corn. Ibach and Lindberg, basing their estimates on crop-response relationships, believe that by 1965, the average yield of corn might be as much as 59 bushels per acre, if 75 percent of the acreage were fertilized at an average rate of 60 pounds of nitrogen per acre. This rate of fertilization would give an estimated marginal return of \$2.00 for each \$1.00 of fertilizer under the price-cost conditions assumed. 4/

Most of the big increase in corn yields resulting from hybrid seed had been realized by 1945 or 1950, although there has been continual improvement in hybrids since then. Improved varieties of barley and oats have increased yields moderately. We appear to be on the threshold of gains of perhaps 25 to 30 percent in yields of grain sorghum as a result of the development of hybrid varieties. Hybrid sorghum seed was available for only about one-fifth of the big acreage of 1957. In 1959, about half the acreage of grain sorghum was planted to hybrid seed, so further substantial gains in yield are in prospect.

Looking ahead for the next 5 or 6 years, we can expect the supply of feed grains to be affected by further changes in yields and by shifts in acreage.

Changes in acreage could have a tremendous effect on production of feed grains if farm programs were altered or even discontinued. In recent years, changes in acreage have not been the major factor, and probably it is realistic to assume that there will be no large changes in land use in the next few years. The most significant changes in production of feed grains are likely to come from continuing changes in yields. For the 4 major feed grains, combined yields per harvested acre in 1957-58 were 21 percent higher than in 1952-53 and about 40 percent above the 1940-42 level. If the trend of yields from 1940 to date were continued to 1965, yields per acre would increase an additional 15 percent. A preliminary projection of 1965 yields has been made by ARS scientists, as shown in table 1. This estimate assumes average weather and further adoption of known improvements in technology. The estimated rate of increase is about half the historical trend.

4/ Ibach, D. B. and Lindberg, R. C. "The Economic Position of Fertilizer Use in the United States." Agr. Res. Ser., USDA, Agr. Inf. Bul. 202, 1958.

In addition to technological improvements in production of feed grains, changes in the efficiency and productivity of forage production must be considered as forages compete with grains in rotations and in rations. This competition is increased by improved methods of handling, storing, pelleting, and processing forages.

Yields of hay have increased also. These increases have not been as rapid as those for corn or sorghum but they have been at least as good as those for the other feed grains. Also, the quality of hay has been improved as a result of a higher proportion of legumes and better harvesting and storage. For example, in 1959 alfalfa hay is 57 percent of all hay, compared with 40 percent 10 years ago. Limited data indicate that average pasture yields also have increased to some extent in both quantity and quality.

There is a growing body of evidence that it would be economical to substitute forages for a part of the grain now fed to dairy cattle in those regions that can produce high-quality forages at low cost. A few years ago, the Farm Economics Research Division, ARS, and the Michigan Agricultural Experiment Station made a study of the cost of feeding dairy cows on actual farms. ^{5/} In the study, cows were fed concentrates at three different rates: 1 pound to 2.6 pounds of milk; 1 pound to 3.7 pounds of milk; and 1 pound to 5.7 pounds of milk. Dairymen with good-quality roughage were able to reduce sharply the amount of concentrates fed, with little, if any, reduction in milk production. The study was based on actual experience with cows that produced about 12,000 pounds of milk. The cows fed concentrates at the lowest rate produced milk at the lowest feed cost.

A study of irrigated pastures in northeastern Colorado made by the Farm Economics Research Division, ARS, in cooperation with the Colorado Agricultural Experiment Station indicates that for the farms studied, digestible nutrients could be produced at least cost per TDN from high-quality pastures. Corn silage was second, alfalfa hay third, and corn for grain fourth. ^{6/}

An unpublished Master's thesis written at Pennsylvania State University by Richard Dailey indicates that in west-central Pennsylvania, alfalfa pasture is the cheapest source of nutrients, followed by corn silage, alfalfa silage, corn, and alfalfa hay.

^{5/} Wilt, H. S. and Hoglund, C. R., Reducing Dairy Feed Costs, Mich. Agr. Expt. Sta. Spec. Bul. 383, 1952.

^{6/} Sitler, H. A. and Rehnberg, R. D., Northeastern Colorado Irrigated Pastures, Colo. Agr. Expt. Sta. Bul. 437-A, 1954.

We have here something of a paradox. Several research studies indicate cost advantages of forages over grains. Yet historical statistics indicate that grains are an increasing part of our total feed supply. Grains have benefitted more than forages from recent labor-saving innovations, but most of these have been taken into account in the cost comparisons used. The advantages of grains in storability, marketing and transportation are not included and must be important factors. Also, it often is difficult for tenants to include perennial forages in their cropping plans. Very probably there is a greater lag in the adoption of improved management practices for forages than for grains. These factors may offset the advantages of forages, but the competition between high-quality forages and feed grains may be closer than is frequently supposed.

Other technological changes that affect feed-grain requirements include improvement in the efficiency of feed conversion through improved breeding, preparation of rations, and management. Experimental results show considerable increase in feed efficiency for all classes of livestock. In beef-feeding experiments, it has been found possible to produce 1 pound liveweight gain with 5.6 pounds of feed. But at the national average level, about 8 pounds are used. In experiments, using pelleted feeds, stilbestrol, and antibiotics, lambs have been fed to produce 1 pound of gain with 4 pounds of feed. This compares with a national average ratio of 1 pound of gain to 10 of feed. Under experimental conditions, hogs can be fed to produce a pound of gain with less than 3 1/2 pounds of feed including feed consumed by the breeding herd. But under farm conditions, the average is almost 5 1/3 pounds. In experiments with high fat rations for turkeys, feed use has been as low as 2.7 pounds per pound of turkey produced, compared with a national average of 5.7 pounds. For broilers, average feed consumption per pound of gain is about 3 pounds, and best experimental results show about 1 pound of gain to 2 pounds of ration.

Some improvement has been made in average feed-conversion efficiency; but except for broilers and turkeys, it has been modest. Improvements in rations and livestock management have been partly offset by the diminishing returns associated with heavier milk production per cow and heavier market weights for beef cattle.

The spectacular improvement in feed efficiency for broilers, and more recently for turkeys, has resulted from a unique combination of new technologies that has focused the attention of producers on maximum meat production per pound of feed.

Most farmers think of maximum production per acre, because land tends to be their most limiting resource, and they have made noteworthy improvements in yield per acre. But, once having been produced, feed crops are fed in a way that will return the highest profit to the farm as a whole rather than the lowest cost per unit of product. As a result, many farmers tend to be careless in the use of feed in years of good yields, and to plan their rations much more carefully in lean years. This tendency is reflected in the fluctuations in the national statistics of feed fed per animal unit.

Maximum production per acre means nothing to the livestock producer who buys his feed. This is the situation of broiler growers. Similarly, integrated hog fatteners and operators of large-scale custom feedlots can be expected to try very hard to improve feed efficiency. The rapid increase in volume of commercial formula feeds indicates that an increasing proportion of livestock production is becoming dependent on purchased feeds. As a result, we may see more rapid gains in feed conversion efficiency.

With respect to possible improvements in feeding efficiency, some preliminary estimates made by the Agricultural Research Service indicate that in the next several years, we might expect beef output per pound of feed to increase by about one-half of 1 percent a year. Milk and pork output per unit of feed probably will increase by about 1 percent a year. For eggs, feed efficiency might increase by about 1 1/2 percent a year. By 1965, improvements in feed efficiency might result in an overall reduction in feed-grain requirements per animal unit of between 3 and 4 percent. This would add about 4 1/2 million tons to feed supplies or reduce acreages of feed grains needed by about 5 million acres.

With 1959 levels of domestic per capita consumption of livestock products, exports of 450 million bushels of wheat and 10 million tons of feed grains, increased yields at the conservative levels of table 1, comparable improvements in pasture production, and with no change in feed efficiency, we could meet wheat and feed-grain requirements in 1965 with 15 to 18 million fewer acres in wheat and feed crops. Alternatively, if acreages of wheat and feed-grain were held at present levels and stocks were not allowed to increase further, enough livestock could be fed so that per capita consumption of red meats would go up from 157.5 pounds in 1959 to about 180 pounds in 1965, and at this level, livestock prices would surely be in trouble. James Cavin of the Agricultural Marketing Service has observed "The price structure of producers is endangered whenever the supply of meat for consumption is much in excess of 160 pounds per capita." 7/

From the review of probable trends in production of feed grains and similar trends in improvement of forage and pasture production, and with the availability of land for feed crops taken into account, it seems probable that for some years to come, unless we have a severe drought, or reduced output for some other reason, we will have a burdensome surplus of feed grains resulting in costly storage problems and a constant threat of surplus livestock production. What adjustment alternatives are there in use of land producing feed crops or in utilization of feed by livestock that might reduce the pressure of feed supplies? Again, we must take account of the effects of technological changes.

7/ Iowa State College Center for Agricultural Adjustment Research, Special Report 24. Proceedings, Feed-Livestock Workshop, February 1959. Ames, Iowa.

Let us first consider the possibility of shifting land from feed crops to grass. This idea frequently pops up in adjustment proposals. The effect of substitution of forage for feed grains would depend upon the level of management followed on pasture and forage lands. As summarized in table 2, available data indicate that there might be little difference in nutrient production per acre if land were shifted from feed grains to high-quality hay or to grass silage, if these crops were managed and fertilized at levels comparable to those of feed grains and if the entire production were eaten or stored. A shift to permanent or long-term pastures would reduce feed production per acre substantially, perhaps by about 50 percent in the short-run until pasture-management practices were improved, but such an adjustment would reduce farm income greatly.

One of the important effects of a shift to either improved or permanent pasture might be in the incomplete utilization of surplus pasture in favorable years. Farmers tend to utilize pasture only to the extent needed and to stock at conservative rates. A study made at Iowa State College indicates that in southern Iowa, farmers having beef herds do not as a rule make a strenuous effort to utilize all available forage. ^{8/} With reference to year-to-year changes, 61 percent of the farmers interviewed planned their livestock programs on the expected output of pasture in the poorer years. Considering seasonal variation, 73 percent of these farmers based their livestock programs on pasture supplied in the lowest period of seasonal production. Only 13 percent stored the surplus pasture available in favorable months by making hay or silage. On the farms studied, 28 percent of available pasture forage was not utilized in 1951, the year of the study. More research on pasture-management practices is needed, but results from the study mentioned probably are indicative of management practices elsewhere, and the lack of easy storability of pasture makes the feed supply much more adjustable than is the case with feed-grain production.

A second adjustment possibility would be to shift some of our production effort from raising grain to be fed to hogs to producing grass for cattle and sheep. If we assume equal numbers of feed units per acre from grain and from forage, a considerable reduction in meat output could be realized by shifting from hogs to beef cattle, for example. On the average, hogs use about 514 feed units to produce 100 pounds of live-weight gain. Ninety-five percent of this feed consists of concentrates. Beef cattle use about 893 feed units, of which 16 percent are concentrates, for 100 pounds live-weight gain. When livestock output is adjusted to a dressed weight, it takes about twice the number of feed units to produce 1 pound of beef as are required for 1 pound of pork and lard. So for each pound of beef substituted for a pound of pork, we could add 1 pound to our feed requirements or subtract 1 pound from the feed supply. This kind of adjustment would reduce the feed surplus, but it would not be economical for farmers to make this adjustment with the price relationships that usually prevail. From 1948 to 1957, the average farm price of hogs in the United States was \$18.92 compared with an average beef price of \$19.95.

^{8/} Heady, E. O., Olson, R. O., and Scholl, J. M. Economic Efficiency in Pasture Production and Improvement in Southern Iowa. Iowa Agricultural Experiment Sta. Res. Bul. 419. Ames. 1954.

Table 2. - Estimated feed production per acre with improved management from alternative uses of land, as shown by selected farm management studies 1/

Crop or land use	Estimated feed production per acre in total digestible nutrients					
	South Carolina, Piedmont	Oklahoma, Eastern Prairie	Pennsylvania, Central	Colorado, N. E. irrigated	Michigan, moderate-ly productive soils	Minnesota, S. E.
	<u>2/</u>	<u>3/</u>	<u>4/</u>	<u>5/</u>	<u>6/</u>	<u>7/</u>
	Number	Number	Number	Number	Number	Number
Grains:						
Corn-----	1,708	1,708	2,640	3,160	3,192	2,653
Oats-----	1,030	---	---	---	1,452	956
Barley-----	---	---	---	2,040	---	1,034
Grain sorghums-----	---	1,491	---	---	---	---
Silage:						
Corn-----	---	---	2,800	5,610	4,800	3,287
Oats-----	---	---	---	---	3,000	---
Alfalfa-brome-----	---	---	---	---	4,120	---
Sudan grass-----	---	---	---	---	2,988	---
Hay:						
Alfalfa-----	---	---	<u>8/</u> 2,576	4,024	---	2,569
Alfalfa-brome <u>9/</u> -----	---	---	---	---	3,320	---
Oats and lespedeza-----	---	2,000	---	---	---	---
Tame pastures:						
Bermuda grass-----	2,825	---	---	---	---	---
Bermuda grass top-seeded with crimson clover-----	3,690	---	---	---	---	---
Tall fescue and ladino	2,500	---	---	---	---	---
Rye grass and crimson clover-----	2,725	---	---	---	---	---
Orchard grass and ladino (av. mgt.)-----	---	---	2,352	---	---	---
Orchard grass and ladino (impr. mgt.)--	---	---	3,120	---	---	---
Irrigated pasture mixt.-----	---	---	---	4,050	---	---
Annual pastures:						
Vetch and rye-----	---	1,350	---	---	---	---
Permanent native pastures:						
With average mgt.-----	---	1,035	1,200	---	---	---
With improved mgt.-----	---	---	1,888	---	---	---

1/ These estimates of feed production are based on good management and improved production practices. The estimated nutrient production from pastures involves an assumption that optimum rates of stocking are maintained. Nutrients are expressed as total digestible nutrients (TDN), which may somewhat overstate the feeding value of forages in comparison with grains. 2/ S. C. Agr. Expt. Sta. Bul. 411, 1953. 3/ Okla. Agr. Expt. Sta. Bul. B-430, 1954. 4/ Pa. Agr. Expt. Sta. Bul. 545, 1951. 5/ Colo. Agr. Expt. Sta. Bul. 437-A, 1954. 6/ Research Problems in the Economics of Forage Production and Utilization, Mich. State Col., Mimeo. 1957. 7/ Minn. Farm Business Notes, May 31, 1955. 8/ Includes 576 TDN aftermath grazing. 9/ Field-

An expanded conservation reserve and land retirement are other possible approaches to adjustment. These cannot adequately be discussed within the context of feed-livestock adjustments. 9/

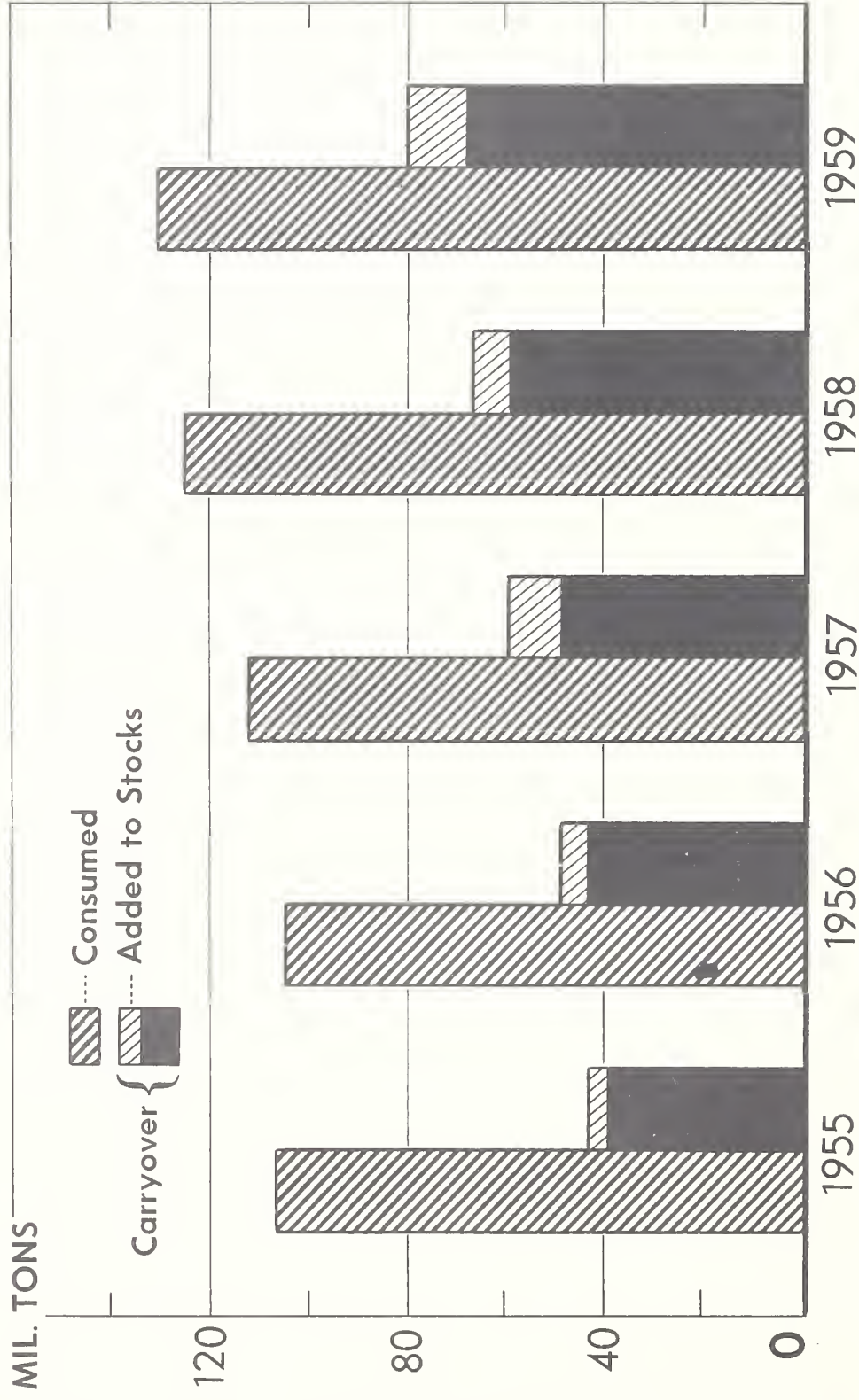
There will be no easy solution to the feed-grain problem. With current projections of population, exports and industrial uses, and with current farm programs, the rate of increase in consumption of livestock products will not catch up with anticipated increases in production of feed and livestock so long as technological progress continues at its present pace, unless we should have a very severe and prolonged drought.

Efforts to cope with the feed-grain problem by diverting lands to more "extensive" uses, such as forages and pasture, may help, but farmers are learning also to increase output of pasture and hay land, and they are finding that improved management and increased fertilization pay for forages as they do for grains.

In any event, the time has arrived when we can no longer assume that surplus acres from any source can be diverted to feed crops without creating new problems equal to or greater than those we are trying to solve.

9/ For a discussion of these, see J. Carroll Bottum, "The Conservation Reserve." Iowa State College Center for Agricultural Adjustment. Special Report 24. Ames, 1959.

FEED-GRAIN FED AND CARRIED OVER



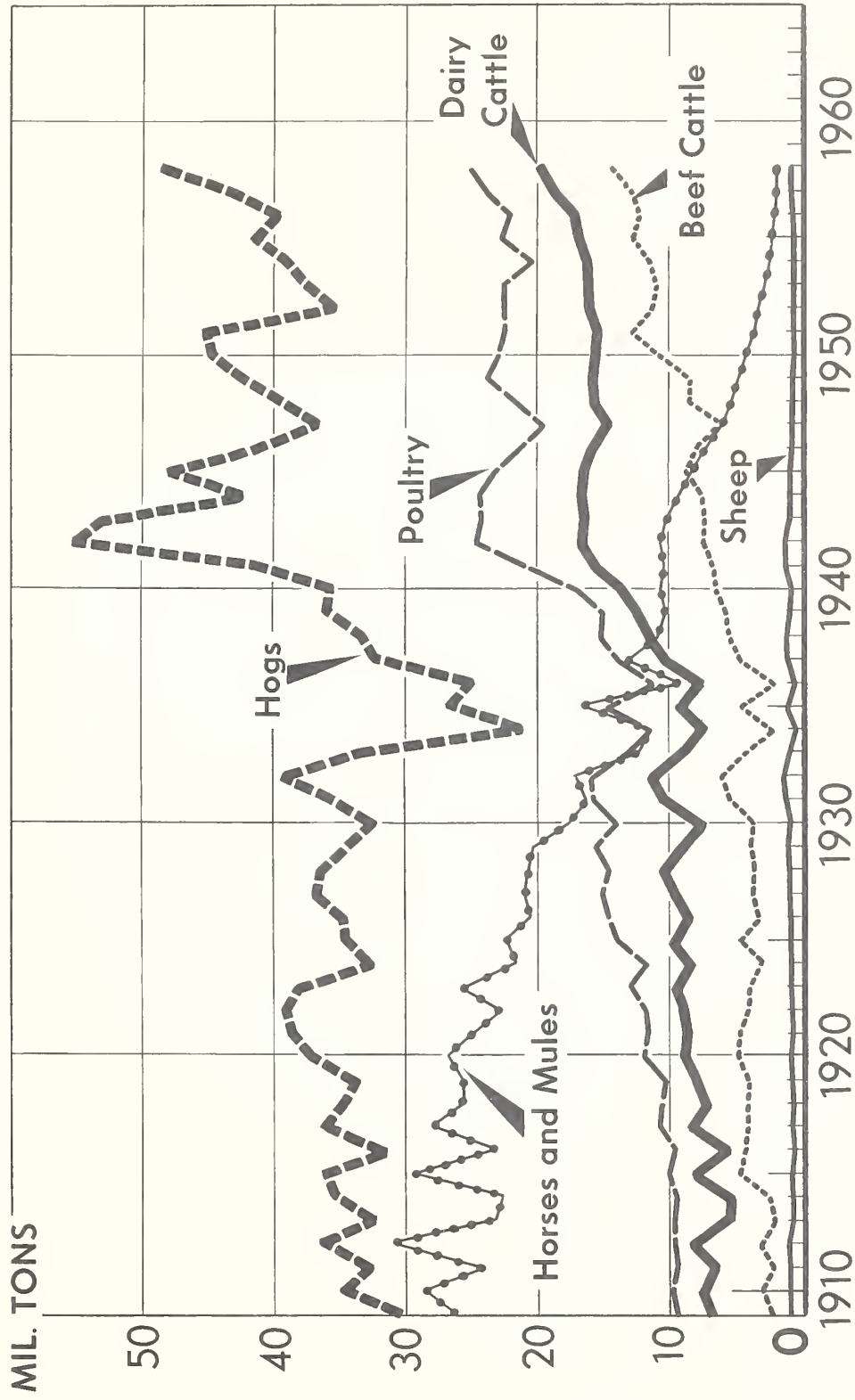
FEEDING YEARS BEGINNING OCT. 1; CARRYOVER AT END OF FEEDING YEAR

1959 PRELIMINARY

U.S. DEPARTMENT OF AGRICULTURE

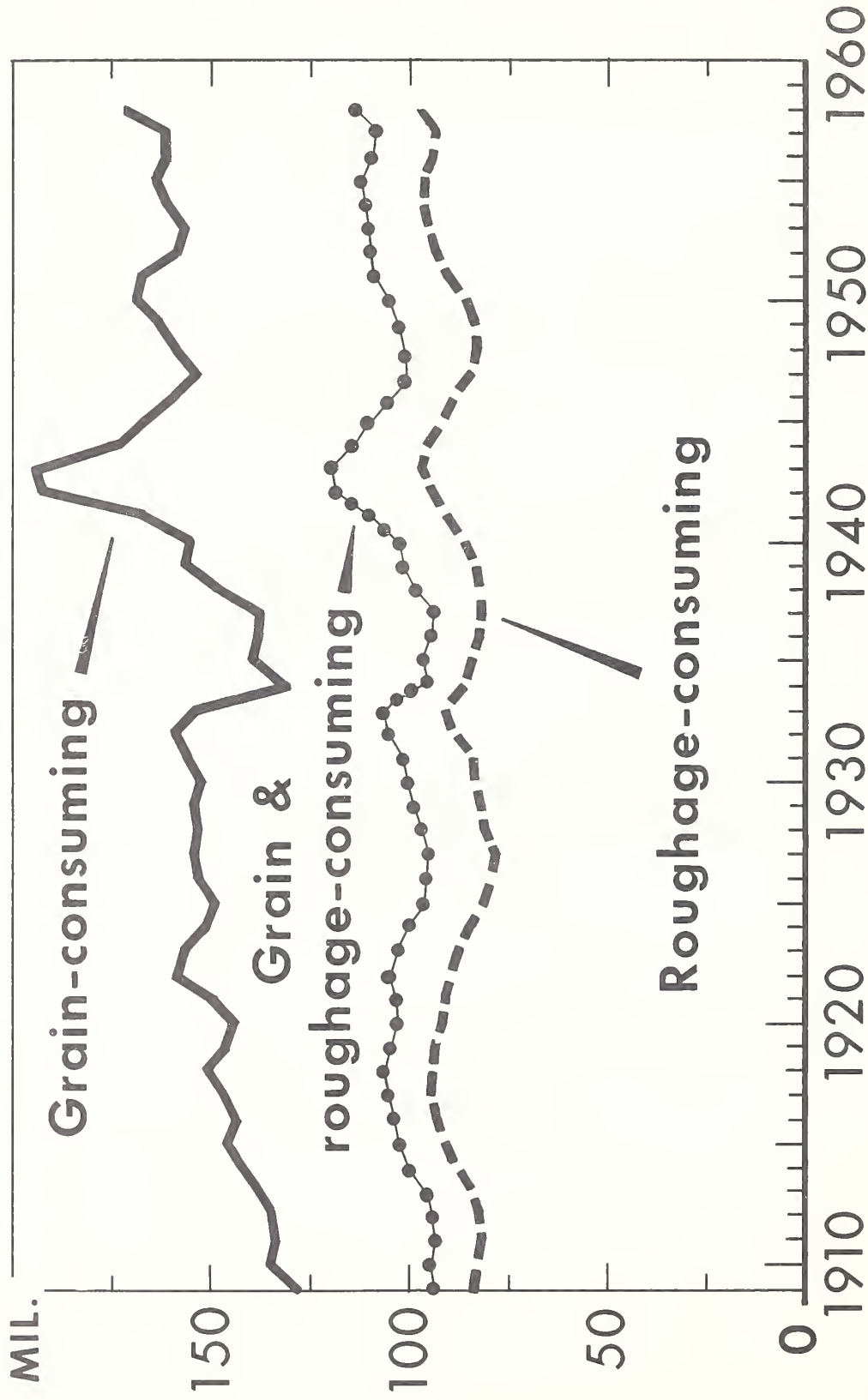
NEG. 59 (10) - 2823 AGRICULTURAL RESEARCH SERVICE

GRAIN CONSUMED BY LIVESTOCK



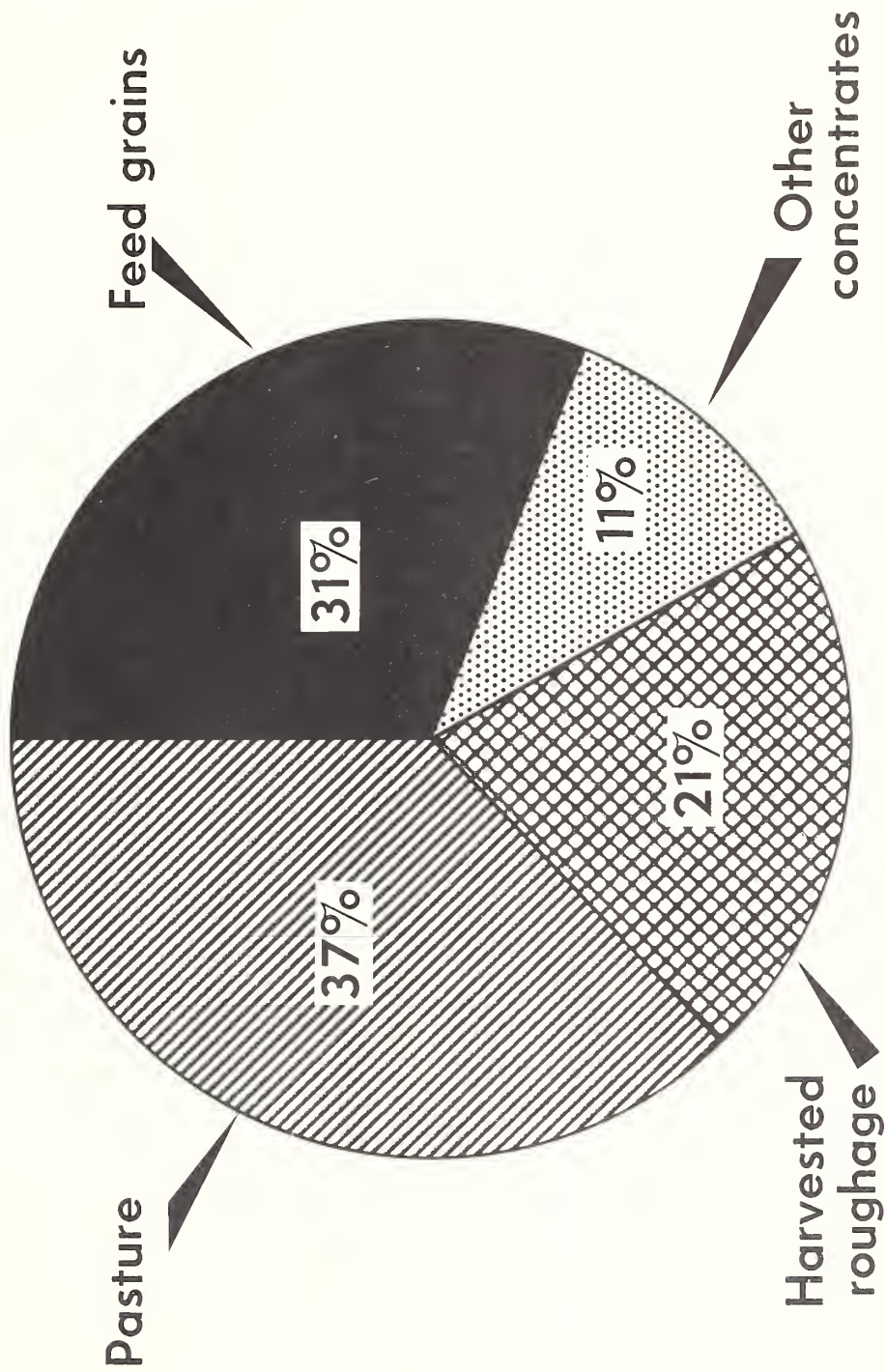
FEEDING YEARS BEGINNING OCT. 1

ANIMAL UNITS OF LIVESTOCK, U. S.

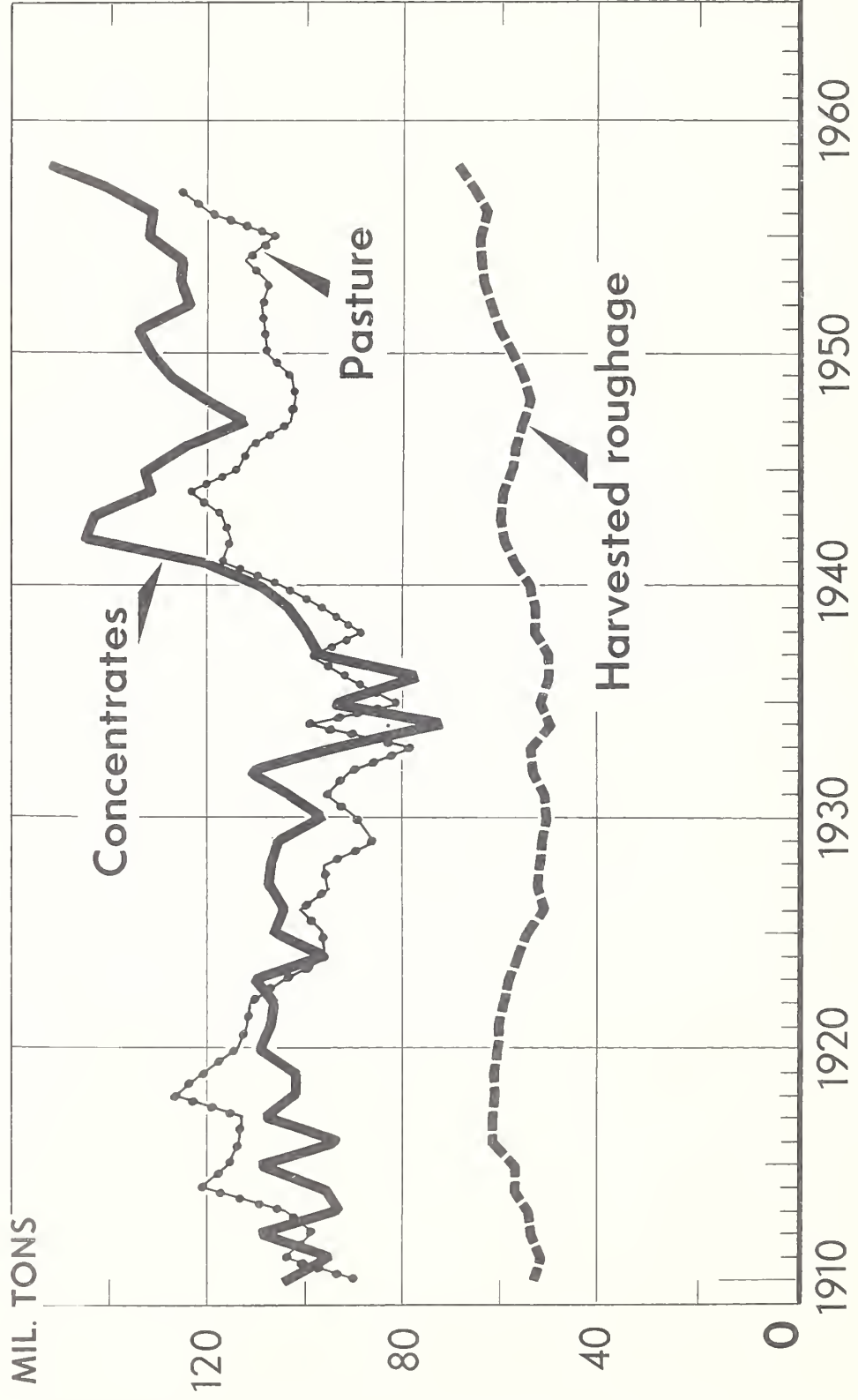


SOURCES OF LIVESTOCK FEED

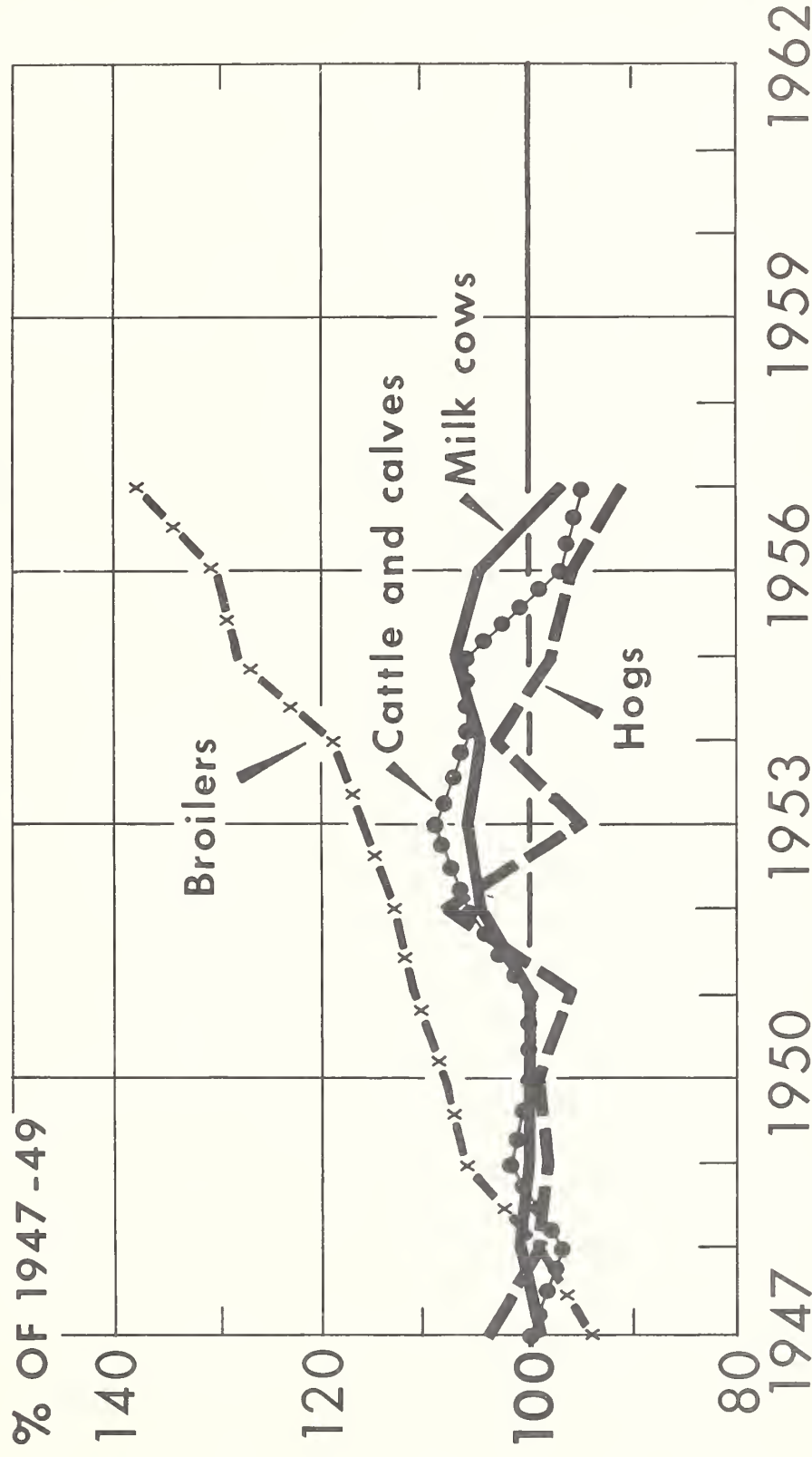
In Feed Units, 1953-57



FEED UNITS BY SOURCE



LIVESTOCK PRODUCTION PER UNIT OF FEED CONSUMED



FOR FEEDING YEARS BEGINNING OCTOBER 1

UNITED STATES DEPARTMENT OF AGRICULTURE
Agricultural Research Service
Institute of Home Economics

TODAY'S HOUSEHOLD REFRIGERATORS

By Earl C McCracken, Physicist

YESTERDAY'S REFRIGERATOR

Commercial production of domestic refrigerators got under way about 1915. Early in the 1920's one maker had the audacity to predict that the market for refrigerators would be larger than that for automobiles. Of course, the "wise men" of the era pointed out that obviously he was in error. Today 97.7 percent of the nation's homes have refrigerators.

In the early development, engineering advancements were predominant; not too much thought was given to styling and convenience features that did not contribute to the purpose of the appliance--refrigeration. One dominant idea was the reduction in number of parts. In 1931 one model of refrigerator had 1240 parts. Today the equivalent model has only 714--a reduction of over 40 percent.

By the mid-30's women began to have their say. The small U-shaped evaporator (ice-cube compartment) was replaced by the wider shallower evaporator shelf on which more articles could be placed. The compressor was moved from the top of the refrigerator to the bottom to allow use of the top as a shelf and to raise the storage compartment to avoid stooping to use it.

During the war years of no manufacture, privations were eased by the promise of the better things to come in the postwar era--the pushbutton age. Automation was expected and the desires--or at least the idyllic dreams of the homemaker--were thought up for her. Styling and convenience and extras became the order of the day and the salesman became the prominent man in the establishment of the models.

Given before the 37th Annual Outlook Conference, U. S. Department of Agriculture, at 8:30 a.m., Thursday, November 19, 1959.

TODAY'S REFRIGERATOR

Prior to World War II, the chief function of the refrigerator was to store fresh and processed food for short periods of time primarily at above-freezing temperatures. Improvements included smaller and quieter compressors, safer refrigerants and better insulation. At the time of World War II, frozen foods and the desire for their home storage imposed their demands upon the manufacture of refrigeration equipment. The tremendous expansion of the frozen-food industry brought a new demand upon the household refrigerator--rightly or not--the storage of frozen foods. One of the immediate needs was for a larger freezing space. This was readily accomplished by replacing the U-type evaporator in the models in which it had been retained by the full-width or across-the-top design and by increasing its depth in the models which were already so equipped.

The enlarged area gave increased frozen-storage space. However, these freezing compartments could not be held at temperatures much below 15°F because of danger of freezing the food in the general-storage space. This design with the horizontal evaporator is known as the conventional refrigerator.

TODAY'S MODELS

Most manufacturers include a conventional refrigerator in their list of models. Ordinarily it is available with either right-or left-hand door (this latter usually at additional cost). It has a single exterior door, an across-the-top lower-temperature space of limited capacity and a main above-freezing general-storage space below it cooled by a descending flow of cold air. These refrigerators are, generally, the low-priced models of each line, usually lacking some of the convenience features found in the higher priced refrigerator-freezer. Since the expiration of the patent on door-shelf storage, all refrigerators now have some door storage.

Some models have adjustable shelves, half shelves, divided crisper, a butter keeper (with a heating element to keep butter at spreading temperature) or butter-storage compartment. Egg trays may be stationary or removable. Tall-bottle storage may or may not take the half-gallon milk carton, be tall enough for gingerale bottles, etc., and may or may not be removed for easy cleaning.

Conventional refrigerators have a crisper, two ice trays, an interior light, temperature-control. Some models have a deep chiller tray beneath the freezer for extra short-time storage of meats and ice cubes, and for quick cooling of salads and desserts. Many have an adjustable

seasonal control for regulating air circulation in the general-storage space. Generally speaking, the conventional refrigerator of today does not have automatic defrosting. Most models have a defrost position on the temperature-control. Some have a push-button that initiates defrosting without moving the control.

To provide temperatures close to 0°F for relatively long-term storage without the accompanying too-low temperatures in the general storage, a second style was developed--"a dual zone" with separate cooling coils for each storage space with insulation between.

To manufacture an appliance that will maintain a freezer temperature of 0°F or lower (the temperature which gives best long-time storage of frozen food) yet maintain temperature of 37°F in the general-storage space, is the current challenge. All manufacturers are trying and some are succeeding quite well. The method of choice is the use of two separate coils. The difference in performance in models and makes seems to lie in the "linkage" between and the locations of the two coils served by the same compressor. For the consumer, the purchase price for this type of refrigerator is high as are the relative costs of operation.

In this combination, the freezer space may be across the top or across the bottom. The main identifying characteristic of the current refrigerator-freezer is that the freezer space and general storage space are sealed-off (insulated) from each other. This is true, regardless of the number of exterior doors.

Refrigerator-freezers have automatic defrosting in the general-storage space. Some use the cycle-method (defrosting during every cycle of the compressor) and some have a once-every-twenty-four-hours clock-controlled method. The latest entry is the frost-free refrigerator. By the use of this method the freezer may also be kept free of frost.

The method of control is to remove the evaporator (cold) coils from the storage space. Frost forms on these coils--out of sight. It can be removed from them by either of the two earlier-mentioned methods. Because the cold coils are in a location removed from the food, a fan is necessary to circulate the cooled air through the storage spaces. With proper packaging in the freezer compartment, the problem of desiccation is not particularly important. In the general-storage section, however, the problem of foods drying out is ever-present.

Combination refrigerator-freezers are as a rule more deluxe in design than conventional refrigerators. Roll out or swing shelves, heated butter keepers, more door shelves, color in trim, interior and exterior--more-difficult-to-clean trim.

The majority of manufacturers include both single-door and two-door models in their lines; some have both across-the-top and across-the-bottom freezer; a few provide a means of draining the defrost water from the freezer; some do not provide racks for ice cube trays. Some are designed to fit flush with built-in cabinets; others have built-in heat exchangers at the back which prevent flush installation and may require two or three inches of air space at the top and sometimes at the sides to permit air circulation. Convenience features vary. They include choice in the number of shelves in the main-storage space, shelf arrangement, number and size of crispers, amount of "tall-bottle" space, the capacity of special egg trays and special storage compartments for meat, ice cubes, etc. Foot pedals for door opening, magnetic door latches, magnetic door gasket, illumination in freezer as well as general-storage space, casters for "rolling" out the refrigerator for cleaning purposes are additional features available.

All refrigerators now have safety latches--either magnetic or mechanical--to meet the requirements established by law. All can be opened from the inside by pushing anywhere along the latch edge of the door with an outward force not exceeding 15 pounds.

On some models the door has a flush-type hinge and the condenser is designed and located so that a built-in appearance may be obtained. Some also have a stop that prevents the door from swinging open far enough to strike adjacent equipment or to damage the hinges.

Changes in buying habits and the increase in number of foods requiring refrigerated storage have resulted in an increase in size of conventional refrigerators purchased over the years. The average size of refrigerators purchased in 1930 was 6 cubic feet: by 1950 this had increased to 8 cubic feet and the average size purchased today is 11 cubic feet. This large increase in the last few years is accounted for by the increased size of the below-freezing space. In order to procure a refrigerator with sufficient general-storage space, it is necessary to get one of large overall size.

Speaking of sizes, rated and actual storage capacities are seldom the same. Rated capacities are calculated from blue prints and rare is the refrigerator in which all of the theoretical storage can be or is utilized. The situation is different in the below-freezing space where the articles can be stored in any position; stacked, laid on their sides or otherwise. In this storage area, waste space is reduced but, nevertheless, differences in shapes and sizes and the inflexibility of packages makes utilization of all of the space impossible. When the storage capacity is rated in pounds, the established conversion factor is 35 pounds per cubic foot--impossible of attainment with an assortment of purchased packages.

OPERATING CHARACTERISTICS

Having discussed some of the construction features of current household refrigerators, the picture is not complete without a little discussion of operating characteristics.

Cost of operation is least for the conventional refrigerator, greatest for the frost-free refrigerator-freezer combinations. Many factors influence cost of operation such as: (1) size of freezer space, (2) temperature of freezer, (3) number of exterior doors, (4) built-in heaters for defrosting--to prevent sweating, to dry refrigerant, and (5) the personal habits of the user. A frost-free combination may cost as much as 40 - 100 percent more to operate than a refrigerator-freezer in which the freezer is manually defrosted.

Eliminating a chore that needs to be done two or three times a year thus becomes rather expensive. However, there are advantages other than the obvious one of never needing to defrost refrigerator and freezer. Ice cubes are dry and do not stick together when stored for future use. Frozen food packages do not stick together and the contents of clear containers are easily visible. There is slightly more storage space as all surfaces are free of frost.

Refrigeration of foods of course, is the primary reason for the use of a refrigerator. By and large, refrigerated storage space is expensive. Storage space for foods that do not need refrigeration can be gotten more cheaply in any number of ways.

Having purchased a refrigerator, a homemaker expects of it a certain performance irrespective, in many cases, of the conditions she knowingly or unknowingly imposes upon it.

Standards developed for testing performance do not require that a refrigerator maintain as low a temperature when the surrounding temperature is 110°F as when it is 70°F or even 90°F. Procedures have not been standardized for determining performance when the door(s) is opened or when "warm" food is placed either in the freezer or general-storage space; in other words, under any condition simulating "in use."

Our recent study involving refrigerators of current manufacture has brought out some interesting information. One of the first points is a verification of earlier findings that the designations placed on evaporator-space doors are misnomers. Most if not all of them, by the use of such terms as "freezer locker," "freezer chest," "food locker" indicate that the space can be used as if it were a freezer--which, indeed, is not the case. We found that temperatures in the low-temperature spaces in various conventional models range from around 9.5 to 28.5°F under standard test conditions. Temperatures lower than these (in some

cases even below 0°F) were gotten in each of these refrigerators when the temperature control was at its coldest setting, but the temperatures in the general-storage area were then also all below freezing.

A second bit of information about conventional refrigerators is that "abuse" of the general-storage space such as opening the door for a long time or for a large number of times, or inserting a large load to be cooled, results in a lowering of the temperature in the lower-temperature space. This happens because the conventional refrigerator has only one set of coils and they are around or in the below-freezing space. When the thermostat calls for refrigeration, the temperature in the coils is lowered and the lower-temperature space "benefits" thereby. If the refrigerator could be designed so that the temperature in the evaporator space could be around zero to start with, conditions for storage of frozen food in a conventional refrigerator would be excellent.

Such a generalization can not be drawn for the combination refrigerator-freezer. "Punishment" of the general-storage space sometimes produced no change in the temperature in the freezer space; sometimes it was raised--sometimes lowered.

In general when packages, either at an intermediate temperature as bought from a store or at an even higher temperature for initial freezing, are inserted into a refrigerator-freezer so that they are not in contact with packages in storage, but only with refrigerated surfaces, the temperatures of the stored packages do not rise. Apparently, as was the case with the conventional-refrigerator, the warmer packages cause activation of the thermostat to lower the temperature of the coils. If, however, the packages are placed to be in contact only with stored packages, the heat interchange causes the expected rise in temperature.

TOMORROW'S REFRIGERATOR

The squared refrigerator of today is the manufacturer's idea of a contribution to the "space-age" design of homes, kitchens, furnishings and other household equipment. The abundance of accessories and conveniences of all kinds, bewildering as they may be to a prospective purchaser, is definite proof of manufacturers' belief that, in spite of the increased cost of operation (not to mention higher initial cost) the consumer trend is strongly in favor of designs having increased convenience and performance. We have no evidence to refute the indication that, as long as the current prosperous economic conditions exist, purchasers of household refrigeration equipment will continue to support more and more conveniences--if they can be found! No evidence exists to indicate that refrigerators will move--like some of the new cars--to smaller, cheaper models with fewer accessories and conveniences.

Much has been said in regard to two possible new sources or methods of refrigeration. One--the use of atomic fuel for power--can be dismissed for the present as not lending itself to the construction of units as small as those for a household. An operation involving a central refrigeration supply feeding out to nearby installations would seem to be the limit of expectancy. If one of small capacity could be developed, however, it would be truly portable and universal in that it would not require any external fuel source but would be entirely independent of supplying wires and pipes.

The second method involving a thermoelectric principle, is diametrically opposed in that, so far, it is only practical in the operation of small installations. To date, the possibility of replacement of the present compressor- and absorption-type refrigerators of the sizes current today seems very remote, if at all attainable. The fact that small installations are feasible and practicable, however, may lead to a rethinking of refrigeration possibilities in the home.

The thermoelectric method is admirably adopted to precise temperature regulation. Why not a small unit of the size and at the location and set for the precise temperature desired for fruits, another for vegetables, one for meats, still another for ice cubes and others for ice cream, etc.?

Needless to say, manufacturers are alert to the mechanical possibilities with each striving to be the first with the best. When they are fully developed for exploitation, then what? Will the home economist be among the first to envision the possibilities of such expanded refrigeration--from just the one refrigerator to several refrigerated areas in the kitchen and on to ice water in the bathroom and/or bedroom and cooled food and drink alongside the barbecued products on porch or patio?

Experimental sets have demonstrated the feasibility of the method but construction costs are relatively high. When this drawback is overcome by mass production or the discovery of even better pairs of dissimilar metals, manufacturers will be ready to supply the answer to any envisioned possibilities.

UNITED STATES DEPARTMENT OF AGRICULTURE
Agricultural Research Service
Institute of Home Economics

WHY INSTALLMENT CREDIT COSTS VARY

By Minnie Belle McIntosh, Family Economist

We have recently had occasion to examine a number of installment credit plans described in newspapers, mailed advertising matter, and mail-order catalogs. Many made no mention of the credit costs involved. Among those which provided sufficient information to determine the credit costs, the data were provided in a variety of ways. In order to compare costs of the various plans we calculated the annual true interest rate charged (note, page 7). We found that these rates ranged from about 7 percent to 36 percent per year (table 1). There were differences between lending agencies, by type of good purchased, length of the repayment period, amount of the loan, and equity of the borrower. All of this must be confusing to the consumer shopping for credit, if he digs deep enough to discover the variations. For those of us who have the job of helping consumers with credit problems it is important to know what these differences are and why they exist.

I. Variations in credit costs

Some of the more important variations in credit costs are related to:

Purpose for which credit is used.--An individual lending agency may charge different rates for different types of loans--that is, depending upon the purpose for which the loan is made. Assume that we are borrowing \$1,500 from a bank. According to the literature from a local bank, the true interest rate will be 7.5 percent if we use the money to buy a new car, and 7.8 percent if we want it to modernize our home. We would have 30 months in which to repay these loans. For an unsecured personal loan--which may be for any number of purposes, such as paying medical expenses, taking a trip, or consolidating some small debts--we would pay interest at the rate of about 14 percent. The bank will discount the note for this personal loan so that we will actually receive \$1,368.75, instead of \$1,500. We will have 15 to 18 months to repay the loan.

The large mail-order houses also vary the interest rate on credit transactions by type of good purchased. For an order totaling \$350, the true interest rate of one mail-order company would be 12.6 percent

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if the goods bought were for modernizing the house; 14.6 percent if they were furniture or appliances; and 18.0 percent if they were miscellaneous items put on a "revolving" account.

Size of loan.--The amount of money or credit involved in an installment contract may affect the interest rate. Consumer finance companies commonly charge higher rates for small than for large loans. From information given in a consumer finance company's advertising in a local paper we calculated the interest rate for cash installment loans of various sizes. In all cases the repayment schedule called for repaying the loan in 20 months. The annual true interest rate for a loan of \$100 to \$300 was 35.6 percent, for \$500 was 16.9 percent, and for \$1,000 was 15.0 percent.

Similarly, the rate of interest charged by one of the airlines for its "package" vacation tours varies according to the expense of the tour. If all installments are paid within 20 months, the true interest charge is about 21.6 percent for a \$260 vacation, 18.9 percent for a \$800 trip, and 16.1 percent for a \$2,500 jaunt.

Length of repayment period.--The length of time it is going to take a borrower to repay his loan may affect the rate of interest he will pay. A local bank's repayment schedule for a new car loan of \$2,000 shows an annual true interest rate of about 7.5 percent if the installment payments extend over a period of 12 to 24 months, and of 10 percent if they cover 36 months.

Consumers may tend to overlook the fact that extending the repayment period makes a big difference in the actual dollar cost of financing installment purchases. In the case of the \$2,000 car loan, for example, where the interest was 7.5 percent on a 12-month repayment schedule and 10 percent on a 36-month period, the interest charge would have amounted to \$82 for the shorter period compared to \$323 for the longer, a difference of \$241. Even if the 36-month loan had been at the same 7.5 percent rate as the 12-month one the cost for 36 months would have been \$240, or \$158 more than the cost for 12 months.

Type of lending agency.--For most types of installment purchases there is usually more than one source of credit available. Banks now finance a wide range of purchases. Some finance agencies specialize in financing car purchases; others lend money for a variety of purposes. Many department stores now sell "soft goods" as well as "hard goods" on the installment basis. Credit unions lend money to their members for various purposes.

In order to illustrate variations in cost of credit by type of lending agency, let's take the purchase of a car. Assume the car costs \$3,100, the downpayment is \$1,000 and the remaining \$2,100 is to be repaid over a 30-month period. The USDA Credit Union lends money for the purchase of automobiles at $3\frac{1}{4}$ percent per month on the unpaid balance, or 9 percent per year.

If the purchaser can arrange a loan through a bank, he may obtain more favorable terms. A study made by the Senate Judiciary committee 1/ reported that in 1958, Washington, D. C. banks were making 30-month loans for purchasing new automobiles at add-on rates ranging from 3 percent to 4 percent--or annual true interest rates of 5.7 percent to 7.5 percent. Recently several local banks have advertised 30-month new car loans with monthly repayment tables which we found were based on a 7.5 percent annual true interest rate.

A third way to finance the sale of the automobile would be through a sales finance agency specializing in car loans. The Senate study indicates that the majority of loans made by nationally known automobile finance agencies were made at 6 to 7 percent add-on rates--or annual true interest rates of 11.1 to 12.8 percent. At least one company was said to write some contracts on the basis of a 9 percent add-on charge, or an annual true interest rate of 16.3. Laws in some States prohibit this high a rate on loans to finance new car purchases.

While we are talking about lending agencies we might note how the relative importance of the various holders of consumer installment debt has changed over the years (chart 1). Retail outlets held almost a third of the \$4.5 billion installment credit outstanding in 1939, but only 15 percent of the \$33.9 billion outstanding in 1958. Commercial banks, which entered the field of installment financing in a small way in the 1920's, held \$1.1 billion, or about one-fourth of total installment credit in 1939, and had increased this to \$12.7 billion, or almost two-fifths by 1958. Credit unions increased their holdings from 3 percent of the total in the earlier year to 8 percent in the later. In terms of rate of increase, credit unions top the list, even though the \$2.7 billion total of their outstanding loans is still relatively small. Sales finance companies held one-fourth of the total outstanding credit both in 1939 and 1958, and consumer finance companies and miscellaneous financial institutions held about 15 percent at both dates. At the present time, therefore, the commercial banks hold a larger volume of installment credit than any other one type of lending agency. These bank holdings are in two forms--direct loans made to individual consumers, and credit "paper" bought primarily from retail dealers.

Amount for "extras" in contract.--Differences in credit costs between various installment plans may be considerably greater than the annual true interest rates alone indicate. Persons financing the purchase of automobiles may find a considerable difference in the "extras" included in installment contracts. Some companies require the buyer to buy auto insurance which they handle, and which may cost more than the buyer could get similar insurance for elsewhere. 1/ Some include premiums for insurance coverage for the entire repayment period in the original amount of the contract, adding appreciably to the dollar cost of the interest if installments cover 2 or 3 years. Some companies require the

1/ Administered Prices--Automobiles, Report of the Subcommittee on Antitrust and Monopoly of the Committee on the Judiciary, U. S. Senate, 85th Congress, 2nd Session, pp. 163-166, November 1958.

buyer to take a package insurance which may include personal accident, bail bond coverage, health, hospital, and ambulance insurance, and credit life insurance as well as the usual liability and collision insurance. Some add charges for such miscellaneous expenses as filing, notary, and documentary fees.

Many lenders are now requiring credit life insurance to cover the debts of installment borrowers and buyers. This type of insurance provides that if the borrower should die while he still owes on a loan, the insurance company will pay the balance due. Credit life insurance is common on credit union and consumer finance company loans, retailers' revolving charge accounts, and various types of installment contracts. Most (4/5 in 1958) of the credit life insurance is in the form of group policies taken out by lenders to cover their accounts. Ordinarily the lender includes the cost of the premium in the charges he makes to the debtor. Recently instances of excessive premiums for credit life insurance have been reported, and some States are trying to push through legislation to bring credit life companies under control. 2/

Figures on consumer debt and credit life insurance outstanding give some idea of the rapid growth of this insurance in the past decade. The amount outstanding in group policies amounted to 10 percent of the total amount of consumer credit outstanding at the end of 1948 and to 38 percent at the end of 1958.

These insurance policies protect the buyer as well as the seller, of course. Some types of car insurance may be required by law; certainly we all agree that certain types of car insurance are highly desirable. But insurance costs must be considered a part of the cost of installment credit to the extent that (1) the same policies could be obtained from another source at a lower rate and (2) the individual's resources, including other insurance policies, are such that payments could, in the event of the borrower's death, be completed without serious consequences to his family and for this reason he would not voluntarily increase his insurance.

II. Reasons for variations in credit costs

Variations in credit costs attributable to the different factors we have described may be substantial. Here are some of the reasons why these factors cause such wide variations.

Credit rating of customers.--Some institutions limit their business to good credit risks. Others extend credit to poorer credit risks, so their costs of collection are frequently substantial and bad debt losses may be larger. These costs are reflected in higher charges to all customers of such agencies.

Collateral for loan.--If the borrower pledges security for the loan, the lender runs less risk of a bad debt loss. Lower interest rates can

2/ Business Week, p. 47, September 26, 1959.

frequently be obtained if the borrower has high grade stocks or bonds to pledge as security. Because title to an automobile does not pass to the purchaser until the last installment is paid, the lender can repossess the car if payments aren't completed. Consequently, rates on automobile loans are typically lower than those for unsecured personal loans. In the event of nonpayment of the unsecured personal loan, the lender may have to garnishee the debtor's wages or bring a court suit against him. Both of these actions are time-consuming and expensive to the lender.

Cost of investigation and record keeping.--The cost of credit investigation and bookkeeping are about the same for a small loan as a larger loan. Consequently, a higher interest rate is frequently charged against smaller loans in order to cover the higher rate of overhead costs.

Longer loan period is more risky.--Why the higher interest rate on a 36-month automobile loan than on a 12-to-24-month loan? In the case of the longer loan period the buyer makes much smaller monthly payments. He may also have made a smaller downpayment. Small payments mean that the buyer's equity in the car builds up very slowly. Therefore, if the seller has to repossess the car, especially in the early months of the loan, he is likely to lose money on the transaction. The higher interest rate on the longtime loan helps to make up for this loss.

Cost of money to lending agency.--Agencies supplying funds for consumer installment credit are not the only ones seeking funds for making loans. They must compete with other groups such as organizations seeking funds to finance mortgages, with manufacturers who want funds to purchase raw material or expand facilities, and with Governments--local, State, and National--which need money for their programs. These borrowers do not necessarily pay the same rate of interest for borrowed funds, but each will be affected by what the others are willing to pay.

Small retailers frequently use inventories as collateral for loans. Such loans usually carry a higher rate of interest than loans secured by real estate, stocks, or bonds because of the administrative expense associated with handling them. 3/ Organizations which have obtained funds at relatively high interest rates necessarily pass the cost on to the consumer in the finance rate established for their installment sales.

We have considered a number of factors which affect the rate of interest charged for installment credit; several of these may be involved in establishing interest rates for a single installment credit plan. All may influence the interest rate in the same direction, or individual factors may be working in opposite direction. In any event, the consumer may find himself well rewarded for the time spent in shopping for credit.

Considerable attention has recently been focused on unethical practices involved in the extension of credit by certain retailers of clothing in the District of Columbia. However, these practices have been

3/ "Security Pledged on Business Loans at Member Banks," Federal Reserve Bulletin, p. 116, September 1959.

attributed to only a very small proportion of retailers who extend credit. Revisions made in the District's laws relating to garnishment of wages are expected to substantially reduce such practices. Abuses growing out of used car sales are reported to be quite serious in the District, and court officials report that existing laws do not adequately cover these situations. ^{4/} But in this case, too, only a small portion of dealers and automobile finance agencies engaged in used car sales are reported to be involved in such practices. Similar situations may exist in some of the States. We have made no attempt to cover these types of situations in our study of credit costs.

III. What is the outlook for installment credit costs

The outlook is for more State control of installment credit. Thirty-five States now have uniform small loan laws in force; nine additional States have laws dissimilar to the uniform act, but considered to provide effective control. Adoption of laws to control small loans are now under consideration in both Alabama and Texas. ^{5/} California recently passed a much stricter law regulating installment sales than it previously had. The new act not only specifies rates which can be charged, but relates sales of services as well as goods, outlaws "fine print" on sales finance contracts, requires full disclosure of just what the time charges are, gives the buyer the right to rebate of interest if he prepays his contract, and protects him from garnishment of wages during the first 60 days of default.

Indications are that the interest rates on some types of consumer installment credit may be raised shortly, if rates for business loans hold at their current high levels, or increase. Rates on short-term business loans have advanced substantially in the past year (chart 2).

The U. S. Treasury recently sold 4-year-10-month notes carrying a 5 percent interest rate--the highest interest rate offered by the Treasury in 30 years. The Federal Housing Administration raised the basic maximum rate on home mortgages it insures from 5-1/4 percent to 5-3/4 percent late in September. A number of banks have raised the rate of interest paid on savings accounts in recent months. Primary interest rates have had little effect on the finance rate charged for many types of installment credit because so many factors enter into the determination of this rate in addition to the cost of money to the lender. However, there are indications that some banks consider a rise in their minimum rates for consumer installment credit inevitable if other interest rates continue to climb. ^{6/}

^{4/} The Sunday Star, p. 1 (Washington, D. C.), November 1, 1959.

^{5/} Business Week, p. 128, May 16, 1959.

^{6/} Business Week, p. 127, June 13, 1959.

NOTE: The direct ratio formula was used in calculating interest rates on installment contracts discussed in this paper. This formula is as follows: $i = \frac{2mD}{P(n+1) + 1/3D(n-1)}$

In this formula,

- i = rate of charge
- m = number of payment periods in 1 year (12 if you repay monthly, regardless of the number of months you actually pay)
- n = number of payments to discharge debt (col. 6)
- D = credit cost in dollars (col. 8)
- P = principal or cash advanced (col. 4)

Example (item 1 from table 1):

$$i = \frac{2(12)(150.00)}{1,500.00(31) + 1/3(150.00)(29)} = \frac{3,600.00}{46,500.00 + 1,450.00} = \frac{3,600.00}{47,950.00} = 0.0752 \text{ or } 7.5 \text{ percent}$$

If the borrower were to have the use of the full \$1,500 for the whole period of the loan, and were charged \$150 interest, his annual interest rate would be 4 percent (\$150 interest for 30 months, or \$60 per year, $\frac{60}{1,500} = 4$ percent). However, in the case of installment

credit as in the example above, the borrower has the use of \$1,500 for only the first month. After his first monthly payment he has use of \$1,450 borrowed funds, not \$1,500. Each month thereafter he has the use of \$50 less than the preceding month. By the 30th month he is using only \$50 borrowed funds. The formula given above takes into account the decreasing amount of credit in use by the borrower.

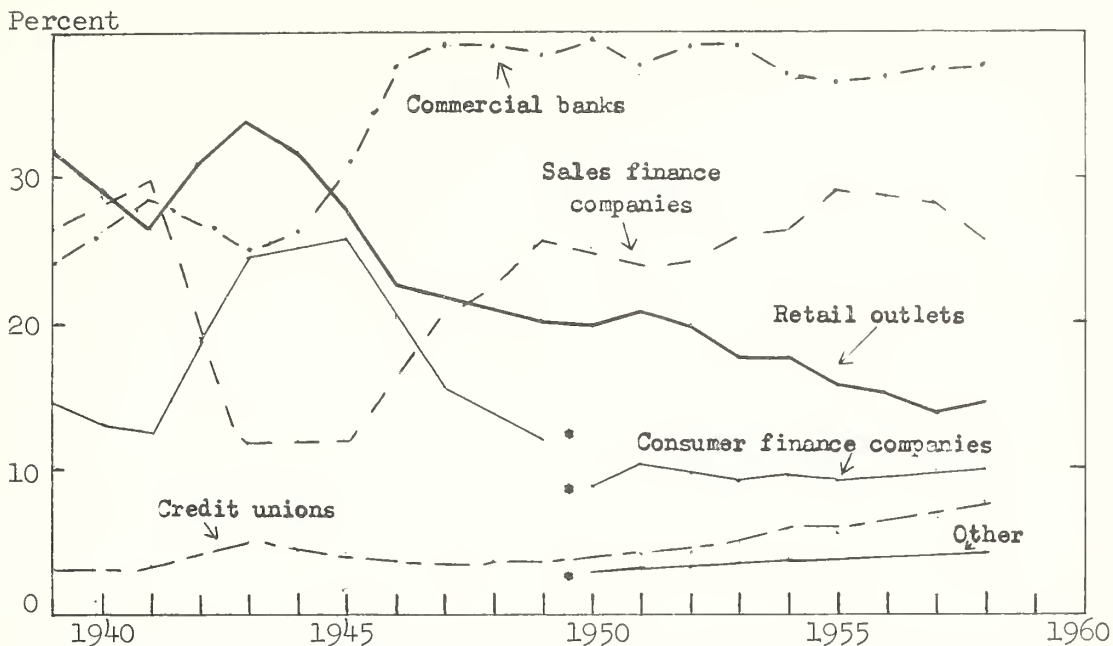
Table 1.--TRUE INTEREST RATE OF CONSUMER INSTALLMENT CREDIT

Item (1)	Price of merchandise or stated amount of loan (2)	Downpayment or amount dis-counted (3)	Credit extended or cash advanced (2)-(3) (4)	Repayment schedule		Total amount paid in installments (5)x(6) (7)	Total financing cost (7)-(4) (8)	Approximate annual TRUE interest rate (9)	Plan offered by (10)
				Monthly payment (5)	Number of months (6)				
Automobile loan...	\$1,500.00	--	\$1,500.00	\$ 55.00	30	\$1,650.00	\$150.00	Percent 7.5	Bank
Modernizing loan...	1,500.00	--	1,500.00	55.17	30	1,655.00	155.00	7.8	Bank
Unsecured personal loan.....	1,500.00	\$ 131.25	1,368.75	100.00	15	1,500.00	131.25	14.0	Bank
Modernizing materials.....	350.00	--	350.00	11.74	36	422.50	72.50	12.6	Mail-order house
Furniture or major appliance.....	360.00	10.00	350.00	16.92	24	406.00	56.00	14.6	Mail-order house
Revolving charge account		Varied						18.0	Mail-order house
Unsecured personal loan.....	100.00	--	100.00	6.72	20	134.40	34.40	35.6	Consumer finance co.
Unsecured personal loan.....	500.00	--	500.00	28.88	20	577.60	77.60	16.9	Consumer finance co.
Unsecured personal loan.....	1,000.00	--	1,000.00	56.81	20	1,136.20	136.20	15.0	Consumer finance co.
Holiday tour.....	290.66	29.66	261.00	15.66	20	313.20	52.20	21.6	Airline
Holiday tour.....	909.00	91.00	818.00	48.02	20	960.40	142.40	18.9	Airline
Holiday tour.....	2,763.05	277.05	2,486.00	142.53	20	2,850.60	364.60	16.1	Airline
Automobile loan...	2,000.00	--	2,000.00	173.53	12	2,082.36	82.36	7.5	Bank
Automobile loan...	2,000.00	--	2,000.00	64.53	36	2,323.08	323.08	10.0	Bank
Automobile loan...	3,126.15	1,042.05	2,084.10	81.60	30	2,447.85	196.95	6.6	4/ Bank
Automobile.....	3,126.15	1,042.05	2,084.10	86.89	30	2,606.59	339.99	11.1	4/ Sales finance co.

1/ Difference due to rounding. 2/ Includes \$162.80 fire, theft, comprehensive, and \$50 deductible insurance, 30 months, and \$9 initial membership fee (excluded if previously a member), also includes \$4 filing and notary fees.

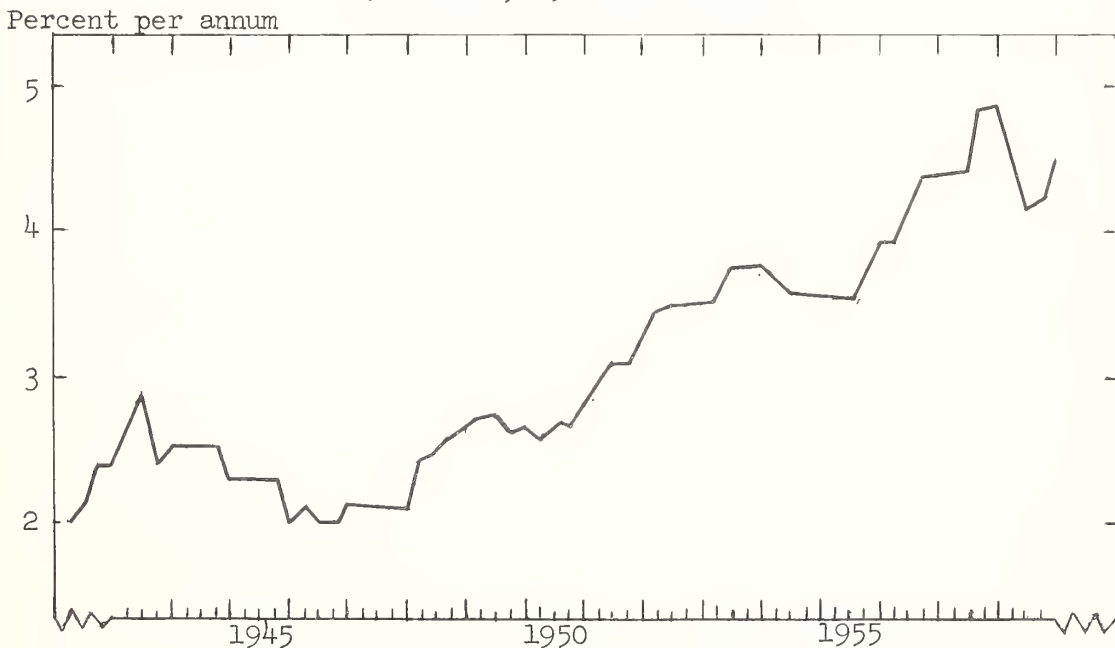
3/ Includes \$182.50 fire, theft, comprehensive, and \$50 deductible insurance, 30 months. 4/ Administered Prices-Automobiles--Report of the Subcommittee on Antitrust and Monopoly of the Committee on the Judiciary, U. S. Senate, p. 164, November 1, 1958.

Chart 1.--CONSUMER INSTALLMENT CREDIT BY HOLDER, 1939-1958



* Consumer finance companies and "other" combined from 1939-1949.
Source: Federal Reserve Board data as of last day of year.

Chart 2.--BANK RATES ON SHORT-TERM BUSINESS LOANS,
QUARTERLY, 19 LARGE CITIES



Source: Federal Reserve Board

For release
November 18 a.m.

UNITED STATES DEPARTMENT OF AGRICULTURE
Foreign Agricultural Service
Grain and Feed Division

WORLD COARSE GRAIN SITUATION AND OUTLOOK

37th Annual Outlook Conference
Washington, D. C., November 18, 1959

The volume of world coarse grain trade has increased steadily and at a very rapid rate over the past five years. Preliminary total of trade data for 1958-59 show that another record was established. Well over 23 million short tons of coarse grains moved in international trade during the past year as compared to about 21.2 million in 1957-58 and average of only about 15 million tons during the period from 1951 through 1955.

There are several important factors which have contributed to this growth. Most important, however, is the general economic growth that has occurred in recent years in much of the world. In those areas where income levels and standards of living were already relatively high, such as in Japan, and much of Europe, increased incomes have resulted in a greater need for livestock products, and consequently, for livestock feed.

Coarse grain production has increased among the grain deficit areas of Europe, but not nearly enough to satisfy the rapidly increasing demand. Thus, import needs have risen at a remarkable rate. Improvements in balance-of-payments situations in many of these countries have, of course, helped greatly to allow this need to be felt on world markets.

Another factor contributing to larger coarse grain trade has been the expanded use of special export programs on the part of the U.S. Government. Foreign currency sales of corn and grain sorghums to India, for instance, have, in effect, created a market which did not previously exist. The sales to India were for human food uses, but concessional sales of this type to other areas have also tended to support the expansion of livestock feeding to some extent.

A third factor which might be mentioned as a contributor to the growth in coarse grain trade is the predominating emphasis of national policies upon wheat production in many grain-deficit countries of the world. While tending to reduce a country's import requirements of wheat, such policies have, in the face of growing feedgrain needs, limited the amount of expansion in production of feedstuffs which might otherwise have occurred.

A great number of coarse grain exporting countries have benefited from the growth in foreign feed grain needs; however, U.S. exports have shown by far the greatest increase. In 1958-59, U.S. exports of coarse grains totaled over 12 million tons, more than twice the 1951-55 average of 5.0 million tons.

The reason why the U.S. has managed to obtain the bulk of this increasing market is that exportable supplies have not been available, at least in increasing quantities, from other sources. Thus, with all its large stocks of

coarse grains, the U.S. has been in a unique position to supply virtually unlimited quantities at relatively constant prices.

Outlook for World Trade

World production of the principal feed grains (corn, barley, and oats) is expected to be slightly larger than in 1958 because of the large corn crop now being harvested in Northern Hemisphere countries. The increase in corn offsets smaller crops of barley and oats.

The demand for imported feedstuffs continues to grow in 1959-60. Trade volumes thus far appear headed for another record, probably in the neighborhood of 25 million tons. Coarse grain production this past season increased considerably in parts of Europe, but again seems to have fallen short of the growth in coarse grain needs. Moreover, pasture conditions during late season in many parts of Europe are known to have been unusually poor, thus adding to the need for other feed materials.

Certainly, the growth in trade cannot continue indefinitely at the rate which has prevailed over the past four or five years. Growth in consumer demand for livestock products will eventually diminish. Meanwhile, domestic production of feedstuffs will continue some growth, and particularly with the help of increased attention from national agricultural policies, may soon succeed in matching the rate of growth in feed requirements. Nevertheless, these developments are some years away. Prospects for the immediate future indicate continued expansion of world coarse grain trade.

Outlook for U.S. Exports

The outlook for U.S. coarse grain exports appear favorable for fiscal year 1960. The tentative forecast is; corn 235 million bushels; barley 110 million bushels; oats 25 million bushels; and grain sorghums 110 million bushels. This total is 12.7 million short tons, slightly larger than the 12.0 million exported in 1958-59. Shipments of U.S. coarse grains have been running quite heavy for the first three months of fiscal year 1960 and are almost 800,000 tons higher than for the same period in 1958-59.

Four countries (Belgium-Luxembourg, Netherlands, West Germany, and United Kingdom) accounted for over 80 percent of the U.S. coarse grain exports to Europe in 1958-59. Coarse grain production in these countries is up slightly from last year mainly as a result of a larger barley crop in the United Kingdom.

After being a net importer of over 100,000 short tons of barley in 1958-59, France will have over 1 million tons available for export in 1959-60. Several Eastern European countries, particularly Yugoslavia, have large corn crops. It is possible that 1 million tons or more of this corn could enter the world market.

The drought that is occurring in wide areas of Europe, while not reducing grain production, has affected pastures and fodder crops. As a result, additional amounts of feed grain will be required during the winter months. This requirement plus the increased needs resulting from growth in the livestock

industry will almost be covered by greater French and Yugoslavian supplies. Therefore, U.S. coarse grain exports to Europe are expected to show only a small gain over the record level in 1958-59. Exports of coarse grain under special government programs are also expected to remain approximately the same as in 1958-59.

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UNITED STATES DEPARTMENT OF AGRICULTURE
Foreign Agricultural Service

WORLD WHEAT SITUATION AND OUTLOOK

Talk by R. E. Vickery
Director, Grain and Feed Division
At the 37th Annual Outlook Conference
Washington, D. C., November 18, 1959

World wheat production in 1959-60 is forecast well below last year's record but will be the second highest of record. The preliminary forecast of 7.9 billion bushels is subject to considerable revision since firm estimates of most Southern Hemisphere crops are not yet available.

The indicated reduction of about 9 percent from the high 1958 level is due mainly to smaller crops in the United States and the Soviet Union. Production in those two large areas is estimated to be 15 - 20 percent less than last year. Harvests are also expected to be down in Argentina and Australia, the principal wheat exporters of the Southern Hemisphere.

Wheat production in Western Europe is the largest of record and import requirements may be lower in normally deficit countries of the area. A sizable amount of wheat will be available for export in France and small quantities in Italy, Sweden, and Spain.

The total volume of 1958-59 world wheat and flour trade is now estimated at 1,259 million bushels. This is 69 million bushels above the final estimate of 1957-58 trade and about 71 million below the record high of 1,328 million established in 1956-57.

The dominant features of last season's world trade were (1) a marked decline in French exports, and (2) a substantial increase in exports to non-Communist areas by the U.S.S.R.

French exports, which reached over 83 million bushels in 1957-58, fell to only about 39 million in 1958-59. Soviet wheat exports meanwhile, are believed to have reached a modern-day record. Imports of Soviet wheat into non-Communist countries reached over 60 million bushels as compared to only about 16 million in 1957-58. As a result, Soviet wheat filled the gap left by the short supply of French wheat. Moreover, in so doing, the Soviet wheat cut sharply into markets which otherwise might have been met with U.S. and Canadian wheat.

Most of the recent growth in the world's wheat and flour trade has been accounted for by larger imports into Asia, particularly India, Pakistan, and several other less well-developed nations where food needs have been outgrowing domestic production. African imports, largely in the form of flour, have also increased somewhat. European imports have been holding very steady at about 600 million bushels, however, a growing portion of these imports are being

supplied by countries within the continent, such as France and Italy. This has resulted in a diminishing market for such traditional overseas sources as the U.S., Canada, Argentina, and others.

Outlook for World Trade

Although earlier estimates predicted a small decline in world trade during 1959-60, indications currently show that little or no change is likely. Imports into European countries may decline 40 to 50 million bushels as compared to last year, but larger offsetting import requirements have appeared in Asia and Latin America.

Exportable supplies are generally higher than a year ago and pressure to sell has increased accordingly. Australia, France, and Spain have considerably more wheat for export and will probably be successful in selling all or most of these increases. Argentina, Turkey, Italy, and the U.S.S.R. all have somewhat less to export during the current season, while the U.S. and Canada continue to hold supplies considerably in excess of what they will be able to sell abroad.

The net effect of the export supply situation as it presently appears will probably be a reduction in the export sales of both Canada and the U.S. Exportable supplies outside the U.S. and Canada are greater in relation to total import demand than was the case in 1958-59. Thus, since these two countries have a vital interest in avoiding any serious disruption of world prices, they will very likely be forced to yield to the increased competition by lowering their export volumes. Canadian exports, which reached 300 million bushels last year, will probably fall to 280 or 285 million bushels, while U.S. shipments will do well to exceed 410 million.

U.S. Wheat Exports Up as Government Programs Expand

With the help of government export programs, U.S. wheat and flour exports have risen considerably over the last several years. Sales for dollars, meanwhile have remained fairly stable at about 150 million bushels annually. Barter sales, after reaching a volume of over 86 million bushels in 1956-57, accounted for only about 20 million bushels during the past two seasons. Sales for foreign currencies under Title I of P.L. 480 have been climbing fairly steadily since they were begun in 1954-55, and last year for the first time accounted for over one-half of total U.S. exports. In 1959-60, Title I sales are again expected to reach a new record.

Generally, about one-third of U.S. wheat production finds a market overseas. Despite a relatively high volume of exports in 1958-59, the record 1958 harvest of over 1.4 billion bushels caused this proportion to fall to its lowest level in four years. In 1959-60, with a harvest of 1.1 billion bushels and exports predicted to exceed 400 million, foreign marketings should again take up roughly 40 percent of U.S. wheat production.

As a result of increased emphasis on special financing measures, U.S. exports to Asia rose phenomenally between 1954-55 and 1956-57, and during each of the last two years, have made up over one-half of total U.S. exports.

Shipments to Europe are declining, primarily as a result of greatly increased production in many parts of the continent. Exports to Asia, Latin America, and Africa should all increase somewhat in 1959-60 over last year.

Outlook for U.S. Exports

U.S. exports of wheat and wheat flour in 1959-60 are likely to fall some 30 million bushels short of the 443-million level reached in 1958-59. Losses are expected to be the greatest in sales to traditional dollar markets of Western Europe. Shipments under special government export programs on the other hand should hold last year's level or even increase slightly.

The principle factor expected to cause a reduction in U.S. exports this year is increased competition from other exporters. Australia and France have much more wheat available for export this year. Their wheats are similar in quality to those offered by the U.S. and their traditional outlets have also been important cash customers for U.S. wheat. Other exporting countries, such as Italy and Argentina, will compete less strongly this year than in 1958-59 but such changes will fall far short of offsetting the increased export availabilities which exist elsewhere.

